Managing Detroit's Air for Environmental Justice

Attachment 4: Quality Assurance Statement

Managing Detroit's Air for Environmental Justice will follow stringent QA/QC protocols ensuring data quality that meets or exceeds industry best practices for air sensors and data visualization as best practices continue to evolve. The Project Manager, working with Clarity, other sensor providers, and JustAir, will create a QA/QC plan ensuring that data from all sources are proven to meet the requirements for their intended use, as outlined in the EPA's Air Sensor Toolbox. This may include, but is not limited to, activities such as:

- co-location,
- verifying sensor performance over time to ensure an accurate correction factor for each sensor,
- ensuring site location (within the selected area, i.e. intersection, park, etc.) is ideal for the goal of the measurements with minimal 'noise.'
- Sensor checks (periodically and as needed) to collect information when sensor readings seem unusual, to understand what's causing the readings.
- Procedures for data standardization from different air sensor types
- Validating the data adjusting for temperature, humidity, cross-sensitivity

The QA/QC manager will also ensure that data visualization and translation into recommendations to protect health will be timely, accurate, and clear. They will ensure the technical accuracy of all written or electronic deliverables and will ensure that trainees follow a standard operating procedure for installing sensors and conducting sensor checks. The goal will be the same accuracy and data quality regardless of who is doing the work or collecting the data. The Project Manager is ultimately responsible for ensuring successful planning and implementation of QA/QC.

Quality Assurance (QA) Plan:

The project partners will collaboratively establish and implement a QA Plan in three phases / tasks:

<u>Planning:</u> We will collaboratively develop a QA plan with input from partners to ensure the quality and robustness of data. This includes identification of appropriate colocation sites (including active ones), characterization/review of proposed sensor locations, and agreement on key metrics required for QC.

<u>Implementation:</u> The project team will work jointly to implement the QA plan, including setting up colocations with regulatory FEM/FRM monitors. Clarity will develop project or region-specific calibration models to adjust the data to a reference monitor, which will be applied to the data in real time.

<u>Assessment:</u> Assessment of sensor network metrics and calibration performance will be done by Clarity and JustAir using agreed upon metrics. The Clarity Dashboard provides information about ongoing calibration and sensor performance and continuous support is available from the project management team.

Quality Control (QC) Activities: The project team will work to jointly define QC activities to ensure adequate data quality, including developing logic for QA/QC flags which can be used to filter out invalid data, leveraging logic Clarity has previously developed. Clarity is developing additional QA/QC procedures to further ensure data are of adequate quality to support project goals. These planned additions, including refining device status and the addition of automatic QA/QC flags, will be completed during the project timeline. The project team has been actively collaborating for over a year and we have already developed project-specific calibration models to ensure high data quality.

QA/QC Team: Operating in concert with the Project Manager, our QA/QC efforts will be led by the following Clarity team members: Dr. Meiling Gao (Chief Operating Officer), who has extensive experience managing low-cost network sensors across the world; Katie Moore (MPH), who has supported management of large and small-scale air quality networks with a focus on environmental justice and community-led monitoring efforts; and Levi Stanton (Lead Solutions Engineer), who has demonstrated expertise developing robust calibration methodologies and has led numerous projects funded by the U.S. Environmental Protection Agency using low-cost sensors across the world.

Colocation and Remote Calibration Process

Particulate Matter (2.5)

For **PM**_{2.5}, we will utilize three different levels of calibration, outlined below, depending on the project's access to Federal Equivalent Method (FEM) monitors for each colocation. These calibration methods significantly improve data quality per EPA's **PM**_{2.5} performance guidelines.¹

- 1. No Colocation: When FEM colocations are not possible, a global model developed using data from different device colocations can be used to adjust the data (i.e., the 2021 Wildfire Model)²
- 2. Clarity-to-Clarity Colocation: When possible, the devices will be colocated with one another for a period of time which is used to normalize the data to either a single monitor or the mean of the group. This further reduces sensor-to-sensor variation and can be combined with a regional model developed using different devices.
- 3. FEM Colocation: Where possible, one or more of the devices are colocated with a FEM reference monitor for a period of at least a month to develop a local calibration model to be applied to the network. If all devices are colocated together, the local model can be combined with a device-specific normalization to improve precision. Where possible, one or more Nodes will be kept at the reference site to allow for ongoing monitoring of calibration performance and this data can be used to adjust the model for shifts in PM composition or seasonal impacts.

Nitrogen Dioxide

Sensor-to-sensor variation in the NO_2 sensor is too high for "global models" to be used to adjust the data, so for the most accurate NO_2 measurements, each Clarity Node-S will be colocated at a FEM/FRM reference sites for a period of one month prior to deployment. Data from this colocation will then be used to develop a device-specific calibration that corrects for baseline non-linear temperature effects and time-dependent humidity effects as well as overall output scaling.

Black Carbon

If the project team decides to utilize black carbon monitors based on community feedback, the QA/QC lead will collaborate with contractors and the Project Manager to develop specific protocols for those monitors and incorporate them into the overall QA/QC plan.

Community Concerns Investigations

The QA/QC lead has identified appropriate hardware to monitor pollutants of concern in the context of emergency monitoring. The project team, guided by the QA/QC lead and reporting to the Project Manager, will develop specific protocols for those and incorporate them into the overall QA/QC plan.

https://www.clarity.io/blog/how-calibration-helps-low-cost-sensors-meet-usepa-and-other-performance-targets

² https://www.clarity.io/2021-wildfire-calibrations

OMB Number: 2030-0020 Expiration Date: 06/30/2024

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read Instructions before completing form.

I. A.	Applican	/Recipient (Name, Address	s, City, State, Zip	Code)			
	Name:	The Green Door Initia	ative				
	Address:	7650 Second Ave., Su	ite 1009				
	City:	Detroit					
	State:				Zip Code: 48202-2412	2	
В.	DUNS N	<u> </u>					
II.	is the ap	plicant currently receiving	EPA Assistance?	Yes No			
III.				laints pending against the ap To not include employment c			
not	applical						
IV.	discrimi	nation based on race, color	, national origin,	laints decided against the ap sex, age, or disability and en nt complaints not covered by	close a copy of all decisions		
not	applical	ole		-	·		
V.	of the re			int/recipient conducted by ar nts based on the review. Plea			close a copy
not	applical	ole					
	1-41	Li and manualina EDA			4. 101. 15	/	
VI.	is the ap	Discant requesting EPA ass		onstruction? If no, proceed	to VII; if yes, answer (a) and	or (b) below.	
a.			will all new facilit	iles or alterations to existing ? If yes, proceed to VII; if no		onstructed to b	oe readily
		Y6		No	, ,		
b				ities or alterations to existing y exception (40 C.F.R. 7.70) a		accessible to	and usable
VII.				nuing notice that it does not n its program or activities?		X Yes	No
a.	. Do the m	ethods of notice accommo	date those with i	mpaired vision or hearing?		X Yes	No
b.		tice posted in a prominent ities, in appropriate period		cant's offices or facilities or, ritten communications?	, for education programs	X Yes	No
c.	Does the	notice identify a designate	ed civil rights coo	rdinator?		X Yes	No
VIII.		applicant/recipient maintai of the population it serves	~ .	lata on the race, color, nation 5(a))	nal origin, sex, age, or	X Yes	No
IX.		applicant/recipient have a nglish proficiency? (40 C.F		for providing access to serv 3166)	vices for persons with	X Yes	No

Χ.	If the applicant is an education program or a compliance with 40 C.F.R. Parts 5 and 7? Pr number of the designated coordinator.	ctivity, or has 15 or more employees, has it designated an crovide the name, title, position, mailing address, e-mail add	employee to coordinate its ress, fax number, and telephone
not	applicable		
XI.		ctivity, or has 15 or more employees, has it adopted grieva t allege a violation of 40 C.F.R. Parts 5 and 7? Provide a le	
not	applicable		
		For the Applicant/Recipient	
kn		n and all attachments thereto are true, accurate and complete. hishable by fine or imprisonment or both under applicable law.	
Α.	Signature of Authorized Official	B. Title of Authorized Official	C. Date
Do	onele J Wilkins	CEO	03/25/2022
	Fo	or the U.S. Environmental Protection Agency	
co: pro	ave reviewed the information provided by the app mpliance information required by 40 C.F.R. Parts	olicant/recipient and hereby certify that the applicant/recipient ha 5 and 7; that based on the information submitted, this application applicant has given assurance that it will fully comply with all applicant has given assurance that it will fully comply with all applicant has given assurance that it will fully comply with all applicant has given assurance that it will fully comply with all applicant has given assurance that it will fully comply with all applicant.	on satisfies the preaward
A.	*Signature of Authorized EPA Official	B. Title of Authorized Official	C. Date

* See Instructions

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General. Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.

Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment). Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities. Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities. The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission. Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution. 40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972. 40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973. The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items "Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed. "Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability. Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission. If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable." In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification. * Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.

* Mandatory Project Narrative File Filename: | 1234-Managing Detroit's Air for Environmental Justice.

Delete Mandatory Project Narrative File

View Mandatory Project Narrative File

To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006 Expiration Date: 02/28/2022

SECTION A - BUDGET SUMMARY

Grant Program Function or	Catalog of Federal Domestic Assistance	Estimated Unob	ligated Funds		New or Revised Budget	
Activity	Number	Federal	Non-Federal	Federal		
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1. Salaries/Benefits	63,624	\$	\$	\$ 63,624.00	\$	\$ 63,624.00
2. Contractual	39,134			39,134.00		39,134.00
3. Other	3,500			3,500.00		3,500.00
4. Travel and Supplies	0	0.00	0.00	0.00	0.00	0.00
5. Totals		\$ 0.00	\$ 0.00	\$ 106,258.00	\$ 0.00	\$ 106,258.00

Standard Form 424A (Rev. 7- 97) Prescribed by OMB (Circular A -102) Page 1

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1) (2) (3) (4)								Total
on any contained annuagement	(1))	(2))	(3))	(5)
		Salaries/Benefits		Contractual		Other		Travel and Supplies	
a. Personnel	\$	227,770.00	\$	0.00	\$] \$		\$ 227,770.00
b. Fringe Benefits		22,770.00]		22,770.00
c. Travel		0.00		0.00		0.00]	2,750.00	2,750.00
d. Equipment		0.00		0.00		0.00]	0.00	0.00
e. Supplies]	10,560.00	10,560.00
f. Contractual				177,977.00]		177,977.00
g. Construction]		
h. Other						31,300.00]		31,300.00
i. Total Direct Charges (sum of 6a-6h)		250,540.00		177,977.00		31,300.00]	13,310.00	\$ 473,127.00
j. Indirect Charges		23,667.00]		\$ 23,667.00
k. TOTALS (sum of 6i and 6j)	\$	274,207.00	\$	177,977.00	\$	31,300.00	\$	13,310.00	\$ 496,794.00
7. Program Income	\$		\$		\$] \$		\$

Authorized for Local Reproduction

Standard Form 424A (Rev. 7- 97) Prescribed by OMB (Circular A -102) Page 1A

	SECTION	C -	- NON-FEDERAL RESC	UF	RCES				
(a) Grant Program			(b) Applicant		(c) State		(d) Other Sources		(e)TOTALS
8. Salaries/Benefits		\$	0.00	\$		\$		\$ [0.00
9. Contractual			0.00						0.00
10. Other			0.00						0.00
11. Travel and Supplies			0.00						0.00
12. TOTAL (sum of lines 8-11)		\$	0.00	\$		\$		\$	0.00
	SECTION	D.	- FORECASTED CASH	NE	EDS	·			
	Total for 1st Year		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter
13. Federal	\$ 106,260.00	\$	26,565.00	\$	26,565.00	\$	26,565.00	\$	26,565.00
14. Non-Federal	\$			1					
15. TOTAL (sum of lines 13 and 14)	\$ 106,260.00	\$	26,565.00	\$	26,565.00	\$	26,565.00	\$	26,565.00
SECTION E - BUD	GET ESTIMATES OF FE	DE	RAL FUNDS NEEDED	FC	R BALANCE OF THE	PR	ROJECT	1	
(a) Grant Program			FUTURE FUNDING PERIODS (YEARS)						
		1	(b)First		(c) Second	ļ	(d) Third	<u> </u>	(e) Fourth
16. Salaries/Benefits		\$	63,624.00	\$	119,405.00	\$	67,518.00	\$	
17. Contractual			38,134.00		69,420.00		69,420.00		
18. Other			3,500.00		13,900.00		13,900.00		
19. Travel and Supplies									
20. TOTAL (sum of lines 16 - 19)			105,258.00	\$	202,725.00	\$	150,838.00	\$	
	SECTION F	- (OTHER BUDGET INFOR	RM.	ATION	1		4	
21. Direct Charges: \$473,340			22. Indirect	Ch	arges: \$23,667				
23. Remarks:	23. Remarks:								

Authorized for Local Reproduction

Standard Form 424A (Rev. 7- 97) Prescribed by OMB (Circular A -102) Page 2



EPA KEY CONTACTS FORM

OMB Number: 2030-0020 Expiration Date: 06/30/2024

Authorized Representative: Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.

Name:	Prefi	x: Ms.		First Name: Done	1 0			M	iddle Name:		
itaino.		L	Wilkins	bone.	T.E				Suffix:		
Title:	CEO		WIIKIIIS								
Comple	L	ldress:	,								
Stree				Suite 1009							
Stree	t2:										
City:		Detroi	it		St	ate:	MI: Michigan				
Zip / I	Postal		48202-2412		c	ountry:					
Phone l			3139228055				Fax Number				
E-mail /	Addre	ess:	donele@gree	ndoorinitiative.	org						
Payee:	Indivi	dual au	uthorized to a	ccept payments.							
Name:	Prefi	x: Ms.		First Name: Done:				M	iddle Name:		
<u>itaine.</u>		L	Wilkins	Done.	re				Suffix:		
Title:	CEO		WIIKIIIS								
Comple											
Stree				Suite 1009							
Stree		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
City:		Detroi	i †		St	ate:	MI: Michigan				
	Postal		48202-2412		c	ountry:		STATES			
Phone I			3139228055				Fax Number:				
E-mail /				ndoorinitiative.	org			L			
				dual from Sponsore	d Progran	ns Offic	ce to contact co	ncerning	administrativ	ve matters (i.	e., indirect cost
rate com	putat	ion, ret	oudgeting requ	iests etc).			***************************************				
Name:	Prefi	x: Ms.		First Name: Rolin	nda			M	iddle Name:	Marie	
	Last	Name:	Barrett						Suffix:		
Title:	Ope:	ration	s Manager								
Comple	te Ad	ldress	<u>.</u>								
Stree	t1:	7650 8	Second Ave.,	Suite 1009							
Stree	t2:										
City:		Detroi			St	ate:	MI: Michigan				
			48202-2412		Co	ountry:		ļ			
Phone I			3139228055				Fax Number	:			
E-mail /	<u>Addre</u>	ess:	donele@gree	ndoorinitiative.	org						

EPA Form 5700-54 (Rev 4-02)

EPA KEY CONTACTS FORM

Project Manager: Individual responsible for the technical completion of the proposed work.

Name:	Prefix: Mrs.	First	Name: Leila				liddle Name:	
	Last Name:						Suffix:	
Title:	Program M	ınager					_	_
Comple	te Address:							
Stree	t1: 7650 s	econd Ave., Suite	≥ 1009					
Stree	t2:							
City:	Detroi	t		State: M	I: Michigan	n		
Zip / F	Postal Code:	48202-2412		Country:	USA: UNITE	D STATES		
Phone I	Number:	3139228055			Fax Number	er:		
E-mail A	Address:	donele@greendoor	initiative.org					

EPA Form 5700-54 (Rev 4-02)

* Mandatory Other Attachment Filename: | 1235-Attachment 5_sole source justification letter

Delete Mandatory Other Attachment

View Mandatory Other Attachment

To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment

Delete Optional Other Attachment

View Optional Other Attachment

OMB Number: 4040-0004 Expiration Date: 12/31/2022

Application for I	Federal Assista	nce SF	-424				
* 1. Type of Submissi	ion:	* 2. Typ	e of Application:	* 1	If Revision, select appropriate letter(s):		
Preapplication		Ne	w [
Application			ntinuation	* C	Other (Specify):		
	ected Application		vision				
* 3. Date Received:		4. Applie	cant Identifier:				
03/25/2022		Γ	Door Initiativ	 7е			
				T			
5a. Federal Entity Ide	entifier: 				5b. Federal Award Identifier:		
273467703							
State Use Only:							
6. Date Received by	State:		7. State Application	lde	lentifier:		
8. APPLICANT INFO	ORMATION:						
* a. Legal Name: T	he Green Door	Initia	tive				
* b. Employer/Taxpay	er Identification Nur	mber (EIN	I/TIN):	T	* c. Organizational DUNS:		
273467703					9650441130000		
d. Address:							
* Street1:	7650 Second A	ve., Sı	uite 1009				
Street2:							
*City: Detroit							
County/Parish:							
* State:	Wayne					٦	
	MI: Michigan						
Province:						_	
* Country:	USA: UNITED S	TATES				_	
* Zip / Postal Code:	48202-2412						
e. Organizational U	nit:						
Department Name:					Division Name:		
f. Name and contac	t information of p	erson to	be contacted on ma	_L att	tters involving this application:		
Prefix: Ms		7	* First Name	٠. 	Donele		
Middle Name:			- I I OCT TOUT		pollete		
	kins						
Suffix:							
Title: CEO							
Organizational Affiliat	tion:						
The Green Door	Initiative						
* Telephone Number:	3139228055				Fax Number:		
*Email: donele@g	*Email: donele@greendoorinitiative.org						

Application for Federal Assistance SF-424
* 9. Type of Applicant 1: Select Applicant Type:
M: Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)
Type of Applicant 2: Select Applicant Type:
Type of Applicant 3: Select Applicant Type:
* Other (specify):
* 10. Name of Federal Agency:
Environmental Protection Agency
11. Catalog of Federal Domestic Assistance Number:
66.034
CFDA Title:
Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act
* 12. Funding Opportunity Number:
EPA-OAR-OAQPS-22-01
* Title:
Enhanced Air Quality Monitoring for Communities
13. Competition Identification Number:
Title:
14. Areas Affected by Project (Cities, Counties, States, etc.):
Add Attachment Delete Attachment View Attachment
* 15. Descriptive Title of Applicant's Project:
Managing Detroit's Air for Environmental Justice
Attach supporting documents as specified in agency instructions.
Add Attachments Delete Attachments View Attachments

Application	for Federal Assistan	ce SF-424					
16. Congressi	ional Districts Of:						
* a. Applicant	13			* b. Pro	ogram/Project	13	
Attach an addit	ional list of Program/Project	Congressional Distric	ts if needed.				
			Add Attachme	nt			
17. Proposed	Project:						
* a. Start Date:	10/03/2022			:	* b. End Date	: 09/30/2025	
18. Estimated	Funding (\$):						
* a. Federal		496,700.00					
* b. Applicant		0.00					
* c. State		0.00					
* d. Local		0.00					
* e. Other		0.00					
* f. Program In	come	0.00					
* g. TOTAL		496,700.00					
* 20. Is the Ap Yes If "Yes", provion 21. *By signin herein are trucomply with a subject me to ** I AGRE ** The list of a specific instruct	te, complete and accura iny resulting terms if I acc criminal, civil, or adminis E ertifications and assurance tions.	ry Federal Debt? (In fy (1) to the statem te to the best of no cept an award. I am strative penalties. (In	ents contained in knowledge. I aware that any f U.S. Code, Title 2	n the list of cer also provide t alse, fictitious, 18, Section 100	rtifications** he required or frauduler 01)	r and (2) that the stateme assurances** and agree at statements or claims in the announcement or age	to nay
Authorized Re	epresentative:						
Prefix:	Ms.	* Fin	st Name: Done	.e			
Middle Name:	Jean						
* Last Name:	Wilkins						
Suffix:							
* Title:	ЕО						***************************************
* Telephone Nu	umber: 3139228055			Fax Number:			
* Email: done	le@greendoorinitiat	ive.org					
* Signature of A	Authorized Representative:	Donele J Wilkins		* Date Sign	ed: 03/25/2	022	



3/25/22

Dear EPA Review Team:

If Green Door Initiative (GDI) receives an award from EPA for its project "Managing Detroit's Air for Environmental Justice project, (MDAEJ)" sole source contracts with Ecology Center, JustAir, and Clarity will be vital to the project's success. GDI justifies the sole source contract as follows:

- <u>Clarity:</u> The project has selected Clarity Node S as our monitor platform. They are a unique resource because our project has an existing relationship with Clarity that it can build from for the project. We have conducted an initial pilot deployment of 5 monitors in Detroit in 2021. This deployment included a successful colocation of the monitors at two State of Michigan/EPA reference monitors and the application of correction factors for particulate matter and nitrogen dioxide. The monitors meet our project goals to use cost effective monitors which can monitor multiple pollutants of interest and have solar battery power for installation flexibility. Additionally, the monitors' solar operation has already proven to successfully operate through a Michigan winter. Working with Clarity puts our project at an advantage that other vendors with similar services cannot match, because the project team is already ahead with a strong understanding of how the Clarity nodes operate in the field in Detroit.
- <u>JustAir</u>: We have selected JustAir as a technical consultant. JustAir is in Detroit and maintains ongoing projects and partnerships in the city as part of their portfolio. This places them at a distinct advantage. Additionally, JustAir has experience working with the Clarity platform in Grand Rapids, Michigan, and will be able to draw on that experience providing a unique resource for the MDAEJ.
- <u>Ecology Center:</u> With years of environmental health experience in Detroit, and, with providing
 monitors and technical assistance to deploy community-led monitoring projects in Detroit, Ecology
 Center is the best-suited for their contracted role in this project. They additionally bring expertise in
 emergency response monitoring, a unique activity within the Managing Detroit's Air for
 Environmental Justice project.

Thank you for your consideration of this sole source justification.

Sincerely,

Donele Wilkins President & CEO

Roberts, Timothy-P

From: Roberts, Timothy-P

Sent: Friday, May 06, 2022 10:05 AM donele@greendoorinitiative.org

Cc: AirMonitoring; Mocka, Corey; Thompson, Ashley; Dowdell, Edward (Ned) **Subject:** Application Eligibility Determination for Enhanced Air Quality Monitoring for

Communities RFA

Attachments: ARP Grant RFA 01-20-2022_final.pdf

We received your application package submitted in response to the above-referenced announcement. After reviewing it in accordance with the requirements and criteria stated in the announcement, we regret to inform you that your application package was determined to be ineligible for award because it did not meet the announcement's threshold eligibility criteria.

Your application package was determined to be ineligible for award consideration because it did not include a required Quality Assurance Statement. Therefore, the application did not meet the following threshold eligibility criteria (see Section III.C. in attached RFA):

4. Applications must include a statement on quality assurance, as specified in Section IV.C.3 of this RFA.

You may obtain a more detailed debriefing of the basis for our decision that your application package was deemed ineligible for award within 15 calendar days – **by May 21, 2022** – of the date you receive this email. Upon receipt of a timely debriefing request, I will contact you to schedule a debriefing at a mutually agreeable time and place.

For further information about the debriefing process and your dispute rights with respect to competition-related issues under the subject announcement, please refer to Section VI of the announcement (attached). If you have any questions about the debriefing or disputes process, you may email me.

We appreciate the effort that went into the preparation of your application package and look forward to your participation in future competitions.

Tim Roberts
Acting Team Leader/JRO
Acquisition Policy Team
OAR, Office of Program Management Operations
U.S. Environmental Protection Agency
202-564-6004
roberts.timothy-p@epa.gov

•	
Skip to content Detroit's Green Door Initiative	
Detroit's Green Door Initiative	
Detroit's Green Door Initiative	■ Detroit's Green Door Initiative

Our Story

Scroll to top

- Background
- o Staff
- Board Of Directors
- o Partners
- Our Work
 - o Ensuring Environmental Justice
 - o Environmental Technician Career Worker Training Program
 - Youth Speak Green
 - o Solar
- Latest News & Resources
- Contact Us

Green Door Initiative © 2020. All right reserved. Developed by Design Connoisseurs.

Our Story

Imagine This:

A world where everyone enjoys clean air, toxic free communities, access to trusted transportation, and healthy food.

Our Mission

Our Vision

Question

If Environmental Justice were achieved in Detroit, what would it look like?

This question put us on the road of discovery. After having worked to fight for and demand environmental justice for more than two decades, founder Donele Wilkins, was confronted with this conundrum. The search for authentic justice in the environment for the underrepresented, overburdened communities represented throughout Detroit and beyond became a challenge to find.

Thoughtfully, the mission began to take shape: To ensure that everyone can live and promote a sustainable lifestyle. Not to oversimplify but the truth is that every human being deserves to breathe clean air, drink safe and healthy water, learn in toxic free school buildings, and play safely in parks free from poisons. No one should be denied the ability to earn a life affirming, family supporting income. Environmental Justice embodies the right to enjoy life to its fullest. It is attainable and the Green Door Initiative has set its sight on this very achievable goal.

We launched in 2010 to offer the realizable goal of good paying jobs with a strong career path; advocating for equal protection under the law for environmental protection, opening doors for young people to find their place in the effort, seeking policy options in a diminishing climate which regulate African Americans and others to the bottom.

Meet The Team
Staff Members
Donele Wilkins
President / CEO
Domiana Carter
Project Manager of the Environmental Technician Career Worker Training Program
Dee Collins
Bookkeeper
Donele Wilkins
President / CEO
Domiana Carter
Project Manager of the Environmental Technician Career Worker Training Program
Dee Collins
Bookkeeper
Carolyn Mitchell
Office Manager
Carolyn Mitchell
Office Manager
Jemiel Marsh
Project Assistant of the Environmental Technician Career Worker Training Program
Tyeisha Hodges

Environmental Justice affirms that we speak for ourselves. We are the champions we have been waiting on!!

Project Assistant
Jemiel Marsh
Project Assistant of the Environmental Technician Career Worker Training Program
Tyeisha Hodges
Project Assistant
Leila Mekias
Project Manager of the MI Department of Health & Human Services (MDHHS) Asthma Project
Quinton Jenkins
Albert Schweitzer Fellow
Jerry Peoples
Job Developer, Environmental Technician Career Worker Training Program
Leila Mekias
Project Manager of the MI Department of Health & Human Services (MDHHS) Asthma Project
Quinton Jenkins
Albert Schweitzer Fellow
Jerry Peoples
Job Developer, Environmental Technician Career Worker Training Program
Board of Directors
Richard F. Carson
Board Member
Keith Cooley

Board Member

Jane Fernanders
Board Member
Donele Wilkins
Board Member
Richard F. Carson
Board Member
Keith Cooley
Board Member
Jane Fernanders
Board Member
Donele Wilkins
Board Member
Brian Flaggs
Board Member
Dawn R. McCloud, Esq.
Board Member
Bruce J. Ross
Board Member
Green Door Initiative is committed to and passionate about our mission to ensure that every person is environmentally literate, capable of practicing and promoting sustainability as a lifestyle. We organize ourselves into four program categories Ensuring Environmental Justice, Environmental Technician Career Worker Training

Program, Youth Speak Green and Solar. Please click the link below to find out more about each program.

Learn More

Who We Work WIth

Our Partners

The work of Green Door is not achievable without the help of our partners. It does require a village of likeminded committed individuals and organizations to achieve such a monumental feat. We are delighted to be on the frontline with others such as:

mejc_logo_color ser-logo Screenshot+2020-08-12+at+10.30.52 Screen Shot 2020-11-24 at 10.26.16 PM Screen Shot 2020-11-24 at 10.26.28 PM Screen Shot 2020-11-24 at 10.26.33 PM Screen Shot 2020-11-24 at 10.26.42 PM Screen Shot 2020-11-24 at 10.26.38 PM climate_justice_climate_emergency_friends_of_the_earth_0 aphelogo_transparent-300x271 🖾 dac download MndD_-3p_400x400 Logo-horizontal-white-text mejn Screen Shot 2020-12-04 at 12.19.31 AM ■ uE_raxAl_400x400 images 360-cures-logo-under-menu-promo download logo_2_439x90 Logo_uaw mejc_logo_color ser-logo Screenshot+2020-08-12+at+10.30.52 Screen Shot 2020-11-24 at 10.26.16 PM Screen Shot 2020-11-24 at 10.26.28 PM Screen Shot 2020-11-24 at 10.26.33 PM

Testimonials

What they've said about us.

Let's Connect

My company relies heavily on Green Door trainees. I even convinced the Detroit Environmental Education Program to outsource its training to Green Door. This is how much I believe in the quality of their work. Green Door has literally helped me build my business to where we are today.

Donna

Vice President of BBEK

I went from being chronically unemployed and getting in trouble with the law, to starting my own environmental nonprofit. I now travel around the country as spokesperson and expert on urban agriculture. Green Door gave me the skills and confidence I needed to turn my life around.

Orlando Thorpe

Green Door Trainee, 2014

It is a basic human right to breathe clean air, have access to safe drinking water, thrive in clean and healthy surroundings, and live in communities free from pollution.

Donele Wilkins

President & CEO

My company relies heavily on Green Door trainees. I even convinced the Detroit Environmental Education Program to outsource its training to Green Door. This is how much I believe in the quality of their work. Green Door has literally helped me build my business to where we are today.

Donna

Vice President of BBEK

I went from being chronically unemployed and getting in trouble with the law, to starting my own environmental nonprofit. I now travel around the country as spokesperson and expert on urban agriculture. Green Door gave me the skills and confidence I needed to turn my life around.

Orlando Thorpe

Green Door Trainee, 2014

It is a basic human right to breathe clean air, have access to safe drinking water, thrive in clean and healthy surroundings, and live in communities free from pollution.

Donele Wilkins

President & CEO

My company relies heavily on Green Door trainees. I even convinced the Detroit Environmental Education Program to outsource its training to Green Door. This is how much I believe in the quality of their work. Green Door has literally helped me build my business to where we are today.

Donna

Vice President of BBEK

I went from being chronically unemployed and getting in trouble with the law, to starting my own environmental nonprofit. I now travel around the country as spokesperson and expert on urban agriculture. Green Door gave me the skills and confidence I needed to turn my life around.

Orlando Thorpe

Green Door Trainee, 2014

It is a basic human right to breathe clean air, have access to safe drinking water, thrive in clean and healthy surroundings, and live in communities free from pollution.

Donele Wilkins

President & CEO

3

2

3

1

• Quick Links

- Our Story
- o Latest News & Resources
- o Contact Us

Programs

- o Environmental Technician Career Worker Training Program
- o Ensuring Environmental Justice
- o Youth Speak Green
- o Solar

· Contact Us

Call us:

(313) 922-8055

Write us:

info@greendoorinitiative.org

• Connect With Us

Green Door Initiative ${\mathbb C}$ 2020. All right reserved. Developed by $\underline{{\sf Design Connoisseurs}}.$

Donele Wilkins

Founder/CEO Green Door Initiative Detroit, MI

Executive Leadership and Operations Management Experience Summary

- > Over 20 years' experience as business owner and Chief Executive
- Exceptional communication and leadership skills a visionary
- > Proven track record of building, leading, training and overseeing multidisciplinary teams
- > Proven track record of fiscal management, growing and sustaining operations
- Exceptional record of building cooperative relationships and partnerships
- > Recognized industry leader and mentor who produces results at the local and national levels
- Strong strategic planning and implementation skills
- Experienced at fundraising via major donors and grant writing
- > Creative problem solver who is comfortable initiating and embracing change
- > Proven track record of starting and expanding programs for over two decades
- > National and local leader in the areas of conservation advocacy, fundraising, policy reform, litigation, research, education and grassroots campaigns

Professional Experience Highlights

- Controlled an operational budget of \$2.1M
- Managed the day-to-day operations for an office staff of 15 with an operating budget of \$1.8M
- Founded and served as the CEO of two non-profits, before starting
- Developed and implemented company business plans
- Served on many local and national executive boards, advisory boards, and advisory committees
- Successful execution of multiple programs within budget and on schedule
- Managed, led, and developed a team of 70 responsible for implementing community-based programs on a national level
- Managed, led, and developed a staff of 30 responsible for conservation advocacy, litigation, research, education, grassroots organization, board relations, affiliate relations, lobbying and fundraising
- Developed and implemented a national strategy for expanding outreach to urban, tribal and Hispanic youth and their families
- Led several statewide and national coalitions for environmental protection
- Taught fundraising and professional development skills as an adjunct instructor for the Detroit Entrepreneurial Institute
- Led and collaborated with over [27 community-based organizations in the greater Detroit area to raise awareness, engage stakeholders, and address environmental health and justice issues
- Developed working relationships with 5 state-wide affiliate organizations to build consensus and support for environmental programs
- Developed and successfully executed \$1,080,000 workforce development focused on the Environmental/Green Collar Sector. The Environmental Technician program has trained over 600 hard to employ individuals with various barriers to employment including formally incarcerated individuals maintaining a 92% completion and job placement rate.

Program Development

• Created Workforce Development Program focused on Environmental / Green Jobs Sector

Wilkins Resume

Wilkins Resume Page 2 of 3

• Created Several Youth Leadership Programs focused on conservation and environmental stewardship

- Developed Core Curriculum for Community Based Environmental Education and Awareness Projects
- Designed and Implemented Case Management Projects for the City of Detroit Lead Elimination Projects
- Participated on several Community Based Participatory Research Projects

Executive Leadership and Board Experience at Local and National Levels

- Advisor, Detroit Climate Equity Advisory Council
- Advisor, Wayne County Sustainability Advisory Council
- Co-Principal Investigator, Community Action to Promote Healthy Environments (CAPHE)
- Provided Technical Assistance to several Community Development Corporations in the City of Detroit
- Appointee to the Detroit Brownfield Redevelopment Authority since 2000
- Appointee to the Detroit Works Project- Community Advisory Committee
- Detroit City Council Appointee, Detroit Brownfield Redevelopment Authority
- Board Member, National Black Environmental Justice Network
- President, Colin Powell Public School Academy Board of Directors
- Fellow, Eureka Fellows
- Authored Build Up Detroit business plan for Detroiters Working for Environmental Justice
- Fellow, Great Lakes Conservation Leadership Project
- Member, Michigan Environmental Justice Coalition
- Board Member, Detroit Urban Research Center
- Advisory Committee Member, Community Action Against Asthma Project, University of MI
- Member, National Environmental Justice Advisory Council
- Advisory Committee Member, Michigan Department of Environmental Quality
- Mayoral Appointee, Detroit Works Project, Community Advisory Committee
- Member, NEJAC Research Workgroup
- Advisory Committee Member, University of MI, Health Impact Assessment Project
- Co-Lead, Community Outreach and Engagement Core, University of MI Environmental Health Science Center
- Fellow, REACH the Decision Makers, Detroit Reproductive Environmental Advocacy Matters (DREAM)

Employment History

FOUNDER/PRESIDENT/CEO 2010- PRESENT 313 Solar LLC DETROIT, MI

FOUNDER/PRESIDENT/CEO
2010- PRESENT
THE GREEN DOOR INITIATIVE (GDI)
DETROIT, MI

Founder/Executive Director 1996-2010
DETROITERS WORKING FOR ENVIRONMENTAL JUSTICE (DWEJ)
DETROIT, MI

Honors

Crains Business 2022 Notable Leader In Sustainability - Detroit, MI MLK –2022 Servant Leadership in Building a Beloved Community, Ann Arbor, MI Detroit City Council Green Taskforce 2018 Lifetime Achievement Award Black History Month Award, University of MI Flint, Flint, MI

Wilkins Resume Page 3 of 3

Spirit of Detroit Award, Detroit, MI
Roselyn Cruthis Community Health Award, Detroit, MI
Conservation Achievement Award, National Wildlife Federation, Washington, D.C.
Green Works Special Recognition, Detroit MI
Spirit of Detroit Award, Detroit, MI
The William "Bill" Lucy Excellence in Coalition Building Ward, Detroit, MI

Education

WAYNE STATE UNIVERSITY (Major: Interdisciplinary Studies)

DETROIT, MI

Jeff Gearhart

Ex. 6 Personal Privacy (PP)

Creative, visionary and compassionate nonprofit program director with over 30 years of experience developing diverse and innovative environmental programs, which change peoples lives. Proven ability to develop creative teams and achieve real-world results, while being flexible and creative to evolve programs when presented with challenges or new opportunities. An innovative leader is known for the ability to win community support, develop diverse coalitions and build relationships with a shared sense of purpose.

EXECUTIVE SUMMARY

Over twenty years of experience in:

- Development and grant management. Managed over \$2.5 million in grants for state and national initiatives
 addressing a range of environmental issues. Developed and successfully funded new multi-year initiatives
 including, HealthyStuff.org, LeadFreeWheels.org and CleanCarCampaign.org. Built comprehensive fundraising
 strategies for programs and organizations including foundation grants, individual and corporate donors.
- Organizational management and capacity building. Worked as an organizational leader within a collaborative work structure with experience in visioning, strategic planning, program development and assessment. Member of Ecology Center Management Team and an active member on various boards and advisory committees within the organization. Construction Manager on the Ecology Center's 2011 LEED-CI office renovation.
- Innovative and creative program development. Developed and implemented many successful campaigns which achieve real-world results. Well-versed in assisting federal and state government agencies and national organizations to develop policy positions.
- Advocacy, marketing, and communications. Extensive experience in conducting both market and public policy campaigns on a diverse range of environmental issues. Work with a wide range of constituents including industry leaders, policy makers, and environmental justice advocates.
- **Cultivating compassion.** Advanced training in compassion and presence through the Rigpa Spiritual Care program. Experienced in using universal spiritual principles to work with diverse audiences on holding authentic presence and communication, and extending compassion toward oneself and others.

PROFESSIONAL EXPERIENCE

Research Director, Ecology Center (2006-present)

Created innovative campaign tools to promote discloser of chemical hazards in consumer products to drive change in corporate and public chemical policy. Developed strategy to use applied analytical testing methods (X-ray and infrared spectroscopy) to rapidly test consumer products and educate the consumer on product hazards. Created the innovative online campaigns HealthyCar.org, HealthyToy.org, and Healthystuff.org. Managed six-person consumer product testing team. Managed national public relations campaigns.

Achievements:

- Lead team that tested over 15,000 consumer products, releasing dozens of product studies
- Lead national communications strategy which achieved national media coverage including appearance on Good Morning America, CNN, Fox and 100's of regional outlets
- Released new studies on toys, mobile phones, children's car seats and lawn & garden equipment.
- Built a sustainable funding base for HealthyStuff.org with foundation funding from many national funders including Merck, Kresge, Park, and New York Community Trust

Campaign Director, Ecology Center (2004-2006) Developed and managed creative new policy campaigns including Partnership for Mercury-free Vehicles and Lead-Free Wheel Balancing Campaign. Managed multi-stakeholder policy campaigns included the steel industry, vehicle recyclers, automotive companies and state environmental departments. Created research, testing, and policy campaign to reduce chemical hazards from vehicles.

Achievements

- Released two major studies on Automotive Sustainable Plastics that resulted in a reduction of PVC use in vehicles.
- Released "Toxic at Any Speed" a first-time study of chemical hazards in vehicle interiors
- Work lead to 11 states passing producer responsibility mercury switch take-back laws between 2003 and 2007.
- Wheel weight campaign lead to 7 states passing lead wheel weight phase-out ban between 2008 and 2009.

Clean Car Campaign Coordinator, Ecology Center (1999-2003)

Coordinated a new national campaign to reduce the life cycle hazards of automobiles, from production, use and end-of-vehicle life. Researched and created a performance-based Clean Car Standard, which included standards for efficiency, emissions, sustainable materials and end-of-life vehicle treatment. Developed national campaigns on reducing mercury and lead components in vehicles.

Achievements:

- Developed and funded Lead Free Wheel Weight with EPA Pollution Prevention grant directly reducing the use of over 5,000 kilograms of lead.
- Created national coalition, including Union of Concerned Scientists, to address clean vehicle policy issues
- Researched and released new studies on lead and mercury containing components in vehicles.

Great Lakes Auto Pollution Prevention Project Coordinator, Ecology Center (1996-1998)

Coordinated the Great Lakes Automotive Pollution Prevention Alliance (GLAPPA). GLAPPA was a network of non-profit community-based organizations in cities located near auto assembly or auto parts plants. Managed partner subgrantees, developed strategy and coordinated campaigns in ten automotive communities (e.g., Detroit, Pontiac, Flint, Lansing, Chicago, Indianapolis) around the Great Lakes. Provided pollution prevention technical assistance and community organizing assistance to communities. Analyzed and developed comments around Clean Air Act permits for automotive painting operations. Promoted clean painting and other clean production technologies.

Achievements:

- Successfully implemented subgrant program to community-based organizations
- Implemented clean production practices at Ford (Dearborn), GM (Lansing) and GM (Pontiac)
- Provided technical review of Clean Air Act New Source Review (NSR) permits for dozens of permits

Other Professional Experience

Environmentalist, Elkhart County Health Department, Goshen, Indiana 12/92-6/95: Educated public about environmental health problems. Primarily responsible for conducting inspections of industrial facilities for compliance with local, state and federal environmental law. Addressed public health complaints, including solid waste, septic, air, groundwater and surface water.

Program Assistant, Ministry With Community, Kalamazoo, Michigan 1/92-10/92: Assisted with programs at low-income and homeless community center. The position involved developing a positive, compassionate and productive community environment through education, counseling, and advocacy.

Coordinator, Ann Arbor Tenants Union, Ann Arbor, Michigan. 9/89-12/91: Co-coordinator of countywide tenants union. The position involved education, advocacy and organizing on issues of affordable housing, homelessness and tenant's rights. Coordinated fundraising and newsletter production. Managed interns & work-study students.

Teaching Assistant, University of Michigan. 1/87-5/89: University of Michigan, School of Natural Resources and Department of Biology. Course titles included Social Change and Natural Resources; Introductory Laboratory Biology; and Biology & Human Affairs.

Farm Organizer/Educator, Iowa Citizens for Community Improvement, Des Moines, Iowa. 5/86-1/87: Organized small farmers on commodity price and credit issues. Facilitated issue discussion, strategy, and leadership development in addition to researching issues raised by farmers. Involved in research, legislative strategy development and grassroots organizing.

MAJOR PUBLICATIONS

Peer Reviewed

Toys, Décor, and More: Evidence of Hazardous Electronic Waste Recycled into New Consumer Products, *Journal of Environmental Protection*, February 2016

Presence and Photo-chemical Breakdown of BFRs in Vehicles, *Society of Automotive Engineers Paper 2009-01-1301*, April 2009

Self Published

Toxic Industrial Chemicals Found in 10 Varieties of Macaroni and Cheese Powders, July 2017

Pets Beware: Toxic Chemicals in Pet Food Cans, June 2017

Traveling With Toxics: Flame Retardants & Other Chemicals in Children's Car Seats, December 2016

[HYPERLINK

"https://drive.google.com/file/d/0B4i7P20xnve5YVpiYkZhODJxSDg/view?usp=sharing" \t "_blank"], March 2016

Floored by Phthalates: New Study Finds Toxic Chemicals Widespread in Flooring Sold by Top Retailers, April 2015 Dollar Store Study, February 2015

Study Finds Toxic Chemicals in a Majority of Seasonal Holiday Décor Products; No Improvement in String Lights or Beaded Garlands, December 2014

Hidden Dangerous Chemicals in Popular Halloween Costumes and "Trick or Treat" Bags, October 2014

2014 Walgreens Study, April 2014

The Chemical Hazards of Mardi Gras Beads and Holiday Garland, December 2013

HealthyStuff.org Guide to New Vehicles, 2011-2012, February 2012

Presence and Photo-chemical Breakdown of BFRs in Vehicles, Society of Automotive Engineers Paper 2009-01-1301, April 2009

HealthyCar.org - The Consumer Guide to Toxic Chemicals in Cars, 2007-2008 Guide to Child Car Seats, July 2008

HealthyCar.org - The Consumer Guide to Toxic Chemicals in Cars 2006, 2007 Guide to Vehicles, May 2006

2006 Automotive Plastics Report Card, The Policies and Practices of Eight Leading Automakers, November 2006

Toxic at Any Speed, Chemicals in Cars and the Need for Safe Alternatives, January 2006

2005 Automotive Plastics Report Card, A Report Card on the Six Leading Automakers, February 2005

Getting the Lead Out, Impacts of and Alternatives for Automotive Lead Uses, July 2003

Toxics in Vehicles: Mercury Implications for Recycling and Disposal, January 2001

SKILLS

ADMINISTRATIVE: Program planning; conflict resolution; event, membership and foundation fundraising; community organizing; group facilitation and leadership development.

SCIENCE & ENVIRONMENTAL HEALTH: Coursework in Organic Chemistry, Biochemistry, Physics, Genetics, Plant Biology, Field Ornithology, and Aquatic Ecology. Training's in Green Chemistry, Pollution Prevention, Clean Production, Title V Air Permitting, Principles of Epidemiology, Public Health Pest Control, Residential Septic Training, Spill Incident Response, Mosquito Identification & Vector Control.

COMMUNICATIONS & COMPUTER: Experienced in writing, editing, layout and design. Developed and manage consumer web site [HYPERLINK "http://www.HealthyStuff.org"]. Macintosh and PC systems, databases (SPSS), graphic design (Illustrator, Photoshop, and Indesign), web page design (HTML code, Drupal, Dreamweaver).



VOLUNTEER WORK

Volunteer with Hospice of Michigan/Arbor Hospice Member of Tibetan Buddism Meditation Mandala, Rigpa (Sogyal Rinpoche) Member of various advisory groups convened by EPA, MDEQ and Wayne County.

EDUCATION

The University of Michigan, School of Natural Resources, Ann Arbor, Michigan BS, Natural Resource Ecology, 1986
MS, Natural Resource Policy & Planning, specializing in education and advocacy, 1989

The University of Michigan, School of Public Health, Ann Arbor, Michigan Visiting Scholar/Partner, 2012-2014

SANDRA TURNER-HANDY

OBJECTIVE

[ADVANCE \u 11]To obtain a leadership position in a community and/or business-based organization, where I can utilize training and skills acquired in various political and non-profit settings.

EXPERIENCE

2008 Michigan Environmental Council

Lansing, MI

Engagement Director

As the engagement director for MEC, I identify and advocate for environmental policies that can be utilized to create a clean, safe, and healthy city and state. I engage and collaborate with various agencies, organizations, communities, and municipalities to promote sustainability of the natural and built environment, and advocate for policies that ensure environmental justice for all residents.

2006 Michigan Democratic Party

Detroit, MI

Community Organizer Blue Tiger Project

As a community organizer I identify, cultivate, and empower under-represented and disenfranchised communities in Detroit around issues affecting their quality of life, by providing available federal, state, and local resources. Provide valuable services, civic engagement, and community support that result in creation of a new generation of civic leaders in the Detroit area.

 $[\ ADVANCE \ \backslash u\ 11] 1999-2005 \quad Senator\ Hansen\ Clarke,\ Michigan\ Senate \qquad Lansing,\ MI$

Chief of Staff

In 1999, I was hired as a Legislative Aide for State Representative Hansen Clarke. As an aide to the Representative, I assisted with his committee assignments, researched and developed policy issues and legislation, was accountable for business, constituent, and senior affairs, and acted as a liaison in Detroit and Lansing.

In 2001, I was promoted to Chief of Staff. This position allowed me to utilize and further develop my managerial skills, as I was now accountable for management and leadership of the office and the staff. In addition to the work I handled as an aide, I worked on education and health care objectives within the City of Detroit.

In 2002, I took a leave of absence to assist the Representative as he ran for the Michigan State Senate against an incumbent Senator. As Campaign Manager, I led campaign staff and volunteers in the office and in the field. Coordinated fundraising activities, maintained the candidate's schedule, and was his representative at events. With strategic planning and diligent work, we were able to win the election.

From 2003 to 2005, I was Chief of Staff to Senator Hansen Clarke. As the staff coordinator and the Senator's advisor, I was accountable for maintaining the office budget, assisting with the Senator's committees, handled any issues concerning education, environmental, senior affairs, and health care, and continued to represent the Senator in both Lansing and Detroit.

EDUCATION

Doctoral of Education with an emphasis in Leadership Development. Expected completion date, Ongoing. Grand Canyon University, Phoenix, AZ

In 2009, I completed a Master of Science in Organizational Leadership Development at Grand Canyon University

In 1993, I completed my Bachelor of Science in Psychology at Wayne State University.

In 1992, I completed an Associates Degree in Liberal Arts at Wayne County Community College.

PROFESSIONAL AND VOLUNTEER APPOINTMENTS

Doing Development Differently in Detroit (D4), Secretary

Clear Corp Executive Board

Bleeding Heart Design, Board of Directors

Zero Waste Detroit, Supervisor

Detroit Environmental Agenda Leadership

MI Environmental Justice Coalition

Detroit Horse Power, Secretary

Impact Detroit, Executive team

City of Detroit Office of Sustainability Commission, Co-chair

Denby Neighborhood Alliance, Lead

Ninth Precinct Community Relations Council, President

REFERENCES

Upon Request

Ex. 6 Personal Privacy (PP)

Leila Mekias

313-720-5624 | lmekias@gmail.com | www.linkedin.com/in/leilamekias

EXPERIENCE

Southwest Detroit Environmental Vision

Detroit, MI

Project Manager of Research Initiatives, Air Quality Section

September 2019-December 2019

- Manage a grant-funded project to investigate the impact of air pollutants on produce within two community gardens in a densely populated industrial community in Detroit.
- Lead efforts to ensure community stakeholders inform development of study design and participate in implementation of research.

City of Detroit Health Department

Detroit, MI

Environmental Health Fellow

August 2017-August 2019

- Developed the use case and implementation plan for a pilot to measure neighborhood-level air quality using low-cost air sensors. Data would inform health and environmental interventions to reduce exposure to air pollution and asthma occurrences across Detroit.
- Led City team defining the public health emergency response to extreme heat events. The project makes cooling centers available to protect residents from the health effects of extreme heat.
- Advised department leadership on environmental policies that impact health. For example, led department response to the proposed MI Lead and Copper Rule and to a variance request from the local fugitive dust ordinance.

Detroiters Working for Environmental Justice

Detroit, MI

Program Coordinator

June 2013-May 2017

- Co-author of the Detroit Climate Action Plan (CAP), a document drawing from the subject expertise of the six working groups which comprised the Detroit Climate Action Collaborative. Co-convened technical experts, business executives, and community leaders to create the CAP.
- Designed and supported a community engagement process ensuring the CAP reflected community input and met technical objectives.
- Analyzed and advocated for local and national climate policies that would promote greenhouse gas reductions and environmental justice, such as the Detroit Greenhouse Gas ordinance and an environmental justice analysis of the Clean Power Plan.
- Led the Detroit Youth Climate Summits, piloting as an ad-hoc, low budget event and culminating as a yearly collaboration with Detroit Public Schools that earned recognition from the White House Office of Science and Technology Policy and COP 21.

EDUCATION

University of Michigan School of Natural Resources and Environment

Ann Arbor, MI

Master of Science, Natural Resources and Environment

May 2013

- Research Assistant, UNESCO, Man and the Biosphere Program: Developed database to support analysis of variables affecting sustainable development outcomes.
- Master's Project: Conducted an integrated assessment to evaluate the adaptive capacity of four Great Lakes cities facing the effects of climate change. Proposed recommendations to increase adaptive capacity.

Southern Methodist University

Dallas, TX

Bachelor of Arts, Environmental Studies and International Studies

May 2010

• Intern, Natural Gas Partners: Developed briefs about investment opportunities within water management and agricultural resource preservation.

ACCOMPLISHMENTS

- Graduate of the Great Lakes Leadership Academy Emerging Leader Program in 2017
- Co-author: Samson, N., Hill-Knott, K., Smith, D., Mekias, L., Howrani Heeres, J., & Sagovac, S. (2014). Planning for Climate Change in Legacy Cities: the Case of Detroit, Michigan. Michigan Journal of Sustainability, 2

INTERNAL REVENUE SERVICE P. O. BOX 2508 CINCINNATI, OH 45201

Date: FER 40 2441

DWEJ2 C/O DONELE WILKINS 5555 CONNER ST STE 3209 DETROIT, MI 48213 Employer Identification Number: 27-3467703 DLN: 17053278324010 Contact Person: ID# 31436 PETER A ORLETT Contact Telephone Number: (877) 829-5500 Accounting Period Ending: December 31 Public Charity Status: 170(b)(1)(A)(vi) Form 990 Required: Yes Effective Date of Exemption: August 23, 2010 Contribution Deductibility: Addendum Applies:

Dear Applicant:

We are pleased to inform you that upon review of your application for tax exempt status we have determined that you are exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code. Contributions to you are deductible under section 170 of the Code. You are also qualified to receive tax deductible bequests, devises, transfers or gifts under section 2055, 2106 or 2522 of the Code. Because this letter could help resolve any questions regarding your exempt status, you should keep it in your permanent records.

No

Organizations exempt under section 501(c)(3) of the Code are further classified as either public charities or private foundations. We determined that you are a public charity under the Code section(s) listed in the heading of this letter.

Please see enclosed Publication 4221-PC, Compliance Guide for 501(c)(3). Public Charities, for some helpful information about your responsibilities as an exempt organization.

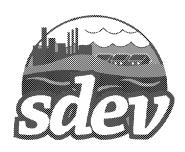
Sincerely,

Lois G. Lerner

Director, Exempt Organizations

Enclosure: Publication 4221-PC

Letter 947 (DO/CG)



March 24, 2022

Donele Wilkins Green Door Initiative 7650 Second Ave Detroit, MI 48202

Dear Donele Wilkins:

I write on behalf of Southwest Detroit Environmental Vision (SDEV) in support of Green Door Initiative's proposal to the Environmental Protection Agency for a grant to fund conduct additional air quality monitoring. We support the grant application and its focus on expanding a community-led air monitoring sensor network. This network will provide data to guide the health and environmental interventions that will reduce exposure to air pollution and ultimately the disproportionate health impacts of pollution that Detroiters experience.

Southwest Detroit Environmental Vision (SDEV) is a 501(c)(3) nonprofit organization whose mission is to improve the environment and strengthen the economy of Southwest Detroit through the partnership with residents, community organizations, government agencies, schools, businesses and industry to combat environmental issues, including air quality, blight (illegal dumping, graffiti, abandoned homes), and incompatible land use.

SDEV acknowledges a specific role we will fulfill in this partnership. If this proposal is funded, we would expect to serve in an advisory capacity for this project. We would guide the project team on air sensor locations and other key components of the network to consider. Our guidance would be based on the community feedback and outcomes we learn as Steering Committee members on the current project to collaboratively plan the goals and design of a community-led air sensor network.

We look forward to working with you to monitor our air, improve health outcomes, and reduce health disparities.

Sincerely,

Raquel Garcia Executive Director

Raguel Borcá

Southwest Detroit Environmental Vision

PO Box 442012, Detroit, MI 48244



March 24, 2022

Donele Wilkins Green Door Initiative 7650 Second Ave Detroit, MI 48202

Dear Donele Wilkins:

We are delighted to provide this letter of support on behalf of Community Action to Promote Healthy Environments (CAPHE) for Green Door Initiative's proposal to the Environmental Protection Agency for a grant to fund a project entitled 'Managing Detroit's Air for Environmental Justice.' We support the grant application and its focus on expanding a community-led air monitoring sensor network in Detroit. This network will provide critical data to guide health and environmental interventions that will reduce exposure to air pollution and ultimately the disproportionate adverse health impacts of pollution experienced by residents of Detroit.

Community Action to Promote Healthy Environments (CAPHE) is a partnership among community-based organizations, community residents, health service providers and public health researchers. Our goal is to develop and implement components of a scientifically-based, community-led Public Health Action Plan to reduce air pollution and associated adverse health effects in Detroit and surrounding communities. CAPHE uses a community-based participatory research approach in which all partners are involved in all phases of the work. Our work builds on a long history of activism within Detroit, led by community residents and organizations, and over 20 years of collaborative research undertaken by academic researchers in partnership with community leaders. Over the years, we have built on and extended our membership, and currently encompass representatives from community based organizations, including Detroit Hispanic Development Corporation, Detroiters Working for Environmental Justice, Southwest Detroit Community Benefits Coalition, and Southwest Detroit Environmental Vision; governmental institutions, including the Detroit Health Department and Michigan Environment, Great Lakes, and Energy; community leaders at large; academic institutions, including the University of Michigan's School of Public Health, University of Michigan-Dearborn, and the University of Detroit, Mercy.

We are in strong support of the proposed initiative and are particularly pleased to specifically contribute to the development of policy and policy advocacy aspects of the training that will be offered to community residents. We have a strong history in this arena, with expertise in evidence-based local policies related to zoning and truck routes, state policies related to cumulative risk that accrues in communities with low political and economic power, contributing to health inequities, and in offering training to promote effective engagement of community members with policy leaders and decision

makers. We look forward to working with GDI, the Ecology Center and JustAir as they lead this exciting new effort.

We look forward to working with you to monitor our air, improve health outcomes, and reduce health disparities.

Sincerely,

Dr. Stuart Batterman

Speak Baltzman

Professor, Department of Environmental Health

Sciences

University of Michigan School of Public Health

Professor, Department of Civil and

Environmental Engineering

University of Michigan College of Engineering

Simone Sagovac

Project Director

Southwest Detroit Community Benefits

Coalition

lding of shoking s

Dr. Amy Schulz

University Diversity and Social Transformation

Professor

Professor, Department of Health Behavior and

Health Education

University of Michigan School of Public Health

- Carry 6.78 G.

Angie Reyes

Executive Director & Founder

Detroit Hispanic Development Corporation

Britain a Rival

Dr. Barbara Israel

Professor, Department of Health Behavior and

Health Education

Dr. Natalie Sampson

University of Michigan School of Public Health

Associate Professor of Public Health

University of Michigan-Dearborn

-24 244

Nick Schreck, JD

Director of Clinical Programs and Associate

Professor of Law, University of Detroit Mercy

School of Law

Simone Charles

Dr. Simone Charles

Clinical Associate Professor of Environmental

Health Sciences

Associate Chair, Curriculum Environmental

Health Sciences

University of Michigan



Laprisha Daniels Executive Director Detroiters Working for Environmental Justice

Theresa Landrum

Theresa Landrum
Detroit Community Activist at 48217

+450g-______

Kathryn Savoie Detroit Community Health Director Ecology Center

Raquel Garcia Executive Director

Southwest Detroit Environmental Vision



March 21, 2022

Donele Wilkins Green Door Initiative 7650 Second Ave Detroit, MI 48202

Dear Donele Wilkins:

I write on behalf of Ecology Center (EC) in support of Green Door Initiative's proposal to the Environmental Protection Agency for a grant to fund "Monitoring Detroit's Air Quality for Environmental Justice." We support the grant application and its focus on expanding a community-led air monitoring sensor network. This network will provide data to guide the health and environmental interventions that will reduce exposure to air pollution and ultimately the disproportionate health impacts of pollution that Detroiters experience.

Ecology Center works to develop innovative solutions for healthy people and a healthy planet. EC has worked for clean air and environmental health and justice in Detroit since the 1990s and has had an office in Detroit since 2008. The Ecology Center started Michigan's first recycling program, led statewide efforts to green the healthcare industry, and developed the Midwest's largest locally funded land preservation program. Our work uniquely blends social enterprise with advocacy and education. Approximately 4.2 million people in southeast Michigan, and others across the state and country, benefit from our work.

EC has participated in the Breathe Free Detroit campaign, playing a leadership role in the effort to close the municipal waste incinerator. Ecology Center is a partner in the University of Michigan Community Action to Promote Healthy Environments (CA-PHE) project, the Wayne State University CURES Community Advisory Board, and other community efforts. Since 2018, in collaboration with community-based organizations in Detroit, the Ecology Center has laid the groundwork for a community-engaged network of air monitors, using low-cost sensors to support clean air awareness and advocacy in Detroit. Since January 2020, Ecology Center has served as the convenor of the Detroit Air Quality Sensor Learning Collaborative (AQSLC), launched by the City of Detroit in 2016. The Collaborative participants include members of two City of Detroit departments, a dozen community organizations, and representatives from regulatory agencies including the State of Michigan Environment, Great Lakes and Energy (EGLE) and Environmental Protection Agency (EPA) Region 5.

The diversity of this collaborative has allowed for improved cross-sector and multi-level information and resource sharing. The organizations involved are using, and/or interested in data from, a wide variety of types of air monitors -- state regulatory quality monitors, mobile research monitors, low-cost community-based monitors, and hand-held and wearable monitors 339 E. Liberty St., Suite 300 - Ann Arbor, MI 48104 - www.ecocenter.org - (734) 761-3186



-- for an array of purposes that include use as a tool for regulatory enforcement, research, and community education and/or advocacy for clean air and better air pollution policies.

With support from the Erb Family Foundation, Ecology Center and Wayne State have conducted an audit of monitors since 2021 and are mapping the network on a new interactive public website, designed with community engagement through the AQSLC and other public engagement opportunities. The site, which will launch in April 2022, integrates data from all regulatory, research and community-based monitors in Detroit and Wayne County, allowing members of the community (whether researchers or residents) easy access to real-time monitoring data from all the monitors in one site, and also includes information about health impacts of air pollution, how to report air quality concerns, participate in air permitting process, and engage in local efforts for clean air. Ecology Center, in collaboration with Grace in Action/Radical Productions, a youth after-school coding program, is developing an air quality complaint/odor tracking app to complement the website.

With funding from the Erb Family Foundation, Ecology Center and partners in Detroit including Green Door Initiative, are undertaking a Collaborative Planning for Clean Air in Detroit & Wayne County project from January - December 2022; this process will engage diverse stakeholders in a community-driven process to identify needs/gaps in the existing air monitoring network, and strengthen collaboration on efforts for clean air in Detroit. The outcomes of this community-driven planning initiative will serve as important inputs for the proposed project to enhance air quality monitoring.

EC acknowledges specific roles and responsibilities we will fulfill in this partnership. If this proposal is funded, we would expect our role in "Monitoring Detroit's Air Quality for Environmental Justice" to include:

- Guiding the air sensor use, maintenance, and data interpretation portions of the project's community-wide air quality training.
- Working with project consultants to ensure that quality assurance/quality control and air sensor data validation and interpretation activities are in line with or exceed industry standards and best practices.
- Training up to three individuals in air sensor installation, maintenance and routine inspections related to data quality control and data interpretation.
- Coordinating this project's expansion of the existing air sensor network with the outcomes of the Collaborative Planning for Clean Air in Detroit and Wayne County project.



We look forward to working with you to monitor our air, improve health outcomes, and reduce health disparities.

Sincerely,

Kathryn Savoie, Ph.D.

Detroit Community Health Director

Ecology Center 339 E. Liberty, Suite 300 Ann Arbor MI 48104



March 23rd, 2022

Donele Wilkins Green Door Initiative 7650 Second Ave Detroit, MI 48202

Dear Donele Wilkins:

I write on behalf of Clarity Movement in support of Green Door Initiative's proposal to the Environmental Protection Agency for a grant to fund a project entitled 'Managing Detroit's Air for Environmental Justice.' We support the grant application and its focus on expanding a community-led air monitoring sensor network. This network will provide accurate, real-time air quality data to guide the health and environmental interventions that will reduce exposure to air pollution and ultimately the disproportionate health impacts of pollution that Detroiters experience.

At Clarity, we leverage our expertise in air sensing technology, IoT devices, and data analytics to revolutionize the way we understand and respond to air pollution. Founded in 2014, we have now deployed our next-generation, highly-accurate indicative air quality monitoring networks in more than 65 countries around the world — empowering our customers to build healthier communities with better data.

Clarity acknowledges a specific role we will fulfill in this partnership. If this proposal is funded, we will install and maintain thirty air sensors throughout the city of Detroit. Clarity's air sensors are modular, and we expect to provide some mix of PM 2.5, PM 10, NO2 and Black Carbon monitors as directed and according to community feedback channeled through our project partners in Detroit. We will also ensure that QA and QC for the sensors are in line with or exceed industry best practices for air sensor deployments. Lastly, we will make available air sensor data in real-time on our data visualization platform.

We look forward to working with you to deepen understanding of Detroit's air quality and expand monitoring coverage in an effort to improve the air together!

Sincerely,

Sean Wihera

VP, Business Development and Partnerships

Clarity Movement E: sean@clarity.io

M: +1-925-876-3381



STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

LANSING



March 22, 2022

To Whom It May Concern:

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) is pleased to provide this letter of support for the Green Door Initiative, in collaboration with the Ecology Center and JustAir, proposal to the Environmental Protection Agency for a grant entitled *Monitoring Detroit's Air Quality for Environmental Justice*. The grant application is focused on expanding a community-led air monitoring sensor network. This network will provide data to guide the health and environmental interventions that will reduce exposure to air pollution.

If the proposal submitted by Green Door Initiative is selected for funding, EGLE will provide collaborative site support including regulatory air monitoring data and other data in support of the project. We look forward to participating in the study and leveraging this supplemental data to better inform our efforts to help protect public health and the environment.

Sincerely,

Susan Kilmer /e-signature

Susan Kilmer, Manager Air Monitoring Section Air Quality Division 517-242-2655



GRETCHEN WHITMER
GOVERNOR

ELIZABETH HERTEL
DIRECTOR

March 23, 2022

Donele Wilkins Green Door Initiative 7650 Second Ave Detroit, MI 48202

Dear Ms. Wilkins:

It is my pleasure, on behalf of the Michigan Department of Health and Human Service's Asthma Prevention and Control Program (MiAPCP), to provide this letter of support for Green Door Initiative's proposal to the Environmental Protection Agency for a grant to fund a project entitled 'Managing Detroit's Air for Environmental Justice.' We support the grant application and its focus on expanding a community-led air monitoring sensor network. This network will provide data to guide the health and environmental interventions that will reduce exposure to air pollution and ultimately the disproportionate health impacts of pollution that Detroiters experience.

The MiAPCP is an interdisciplinary program, working to reduce Michigan's asthma burden by carrying out a comprehensive plan that addresses asthma through infrastructure support and partnerships by implementing key evidence-based strategies. MiAPCP has a successful history of working with the Green Door Initiative on strategies to address air quality issues in Detroit. The goals of 'Managing Detroit's Air for Environmental Justice' are in line with priorities listed in the Asthma in Michigan 2020-2025: Plans for Action.

We are excited to continue our successful partnership, and strongly support this application. If this proposal is funded, we would advise the development of the training module on the health impacts of air pollution. We look forward to working with you to improve health outcomes and reduce health disparities.

Sincerely,

Best of

Beth Anderson, MPH

Chronic Disease Epidemiology Section Manager/MiAPCP PI

Michigan Department of Health and Human Services



March 25, 2022

Donele Wilkins Green Door Initiative 7650 Second Ave Detroit, MI 48202

Dear Donele Wilkins:

I write on behalf of Great Lakes Environmental Law Center (GLELC) in support of Green Door Initiative's proposal to the Environmental Protection Agency for a grant to fund a project entitled 'Managing Detroit's Air for Environmental Justice.' We support the grant application and its focus on expanding a community-led air monitoring sensor network. This network will provide data to guide the health and environmental interventions that will reduce exposure to air pollution and ultimately the disproportionate health impacts of pollution that Detroiters experience.

The Great Lakes Environmental Law Center is a Detroit-based nonprofit that offers community education, policy support, and various legal services to address environmental, resource, & energy issues affecting communities in and around Detroit, all over Michigan, and throughout the Great Lakes region.

Be it air, water, or land, every day decisions are made and actions are taken that impact the environment, energy, and resources on which Great Lakes communities rely. At the heart of the Center's mission is engaging with those communities. Through that engagement, community members educate us on how pollution, insufficient access to justice, and poor resource management affect their lives; and they advise us on what solutions should look like where they live, work, and play. We absorb those perspectives and work to implement educational, policy, and legal strategies that contribute to addressing the community's needs and desires. We do all this through working with law students because part of our mission is that they can and do play a major role in shaping the future of environmental law.

GLELC acknowledges a specific role we will fulfill in this partnership. If this proposal is funded, we would advise the development of the community training module on environmental policies and decision-making processes.

We look forward to working with you to improve health outcomes and reduce health disparities.

Sincerely,

Nick Leonard Executive Director Great Lakes Environmental Law Center

Protecting the world's greatest freshwater resource and the communities who depend upon it.

4444 2nd Avenue, Detroit, MI 48201 (313) 782-3372 www.glelc.org



March 23, 2022

Donele Wilkins Green Door Initiative 7650 Second Ave Detroit, MI 48202

Dear Donele Wilkins:

I write on behalf of JustAir in support of Green Door Initiative's proposal to the Environmental Protection Agency for a grant to fund Managing Detroit's Air for Environmental Justice. We support the grant application and its focus on expanding a community-led air monitoring sensor network. This network will provide data to guide the health and environmental interventions that will reduce exposure to air pollution and ultimately the disproportionate health impacts of pollution that Detroiters experience.

JustAir exists to protect the 20,000 breaths a person takes a day, where the quality of life is largely determined by where those breaths are taken. Unfortunately for many underserved communities who are often overexposed to heavy trucking traffic and industrial activity, those 20,000 breaths a day tend to work against their wellbeing. JustAir was founded with the belief that no matter what community one is born into it is their right to a life of breathing clean air. We are committed to bringing best in class monitoring data solutions to our most vulnerable communities and aim to be a generational partner to support generational improvements of the air we breathe.

JustAir acknowledges a specific role we will fulfill in this partnership. If this proposal is funded, we would expect to participate in the following ways:

- Serve in an advisory capacity for the Managing Detroit's Air for Environmental Justice project. We would
 guide the project team on air sensor locations and other key components of the network to consider. Our
 guidance would be based on the community feedback and outcomes we learn as Steering Committee
 members on the current project to collaboratively plan the goals and design of a community-led air
 sensor network.
- Develop an alert system for residents to receive text notifications on their phones when the air sensor network picks up pollution levels which are detrimental for health.
- Develop a dashboard based on real-time data from the air sensor network, building from the standard data visualization provided by Clarity.
- Collaborate with other groups to integrate the sensor data available on other platforms into the project's dashboard.

We look forward to working with you to monitor our air, improve health outcomes, and reduce health disparities.

Sincerely,

Darren Riley, CEO / Co-Founder JustAir Solutions 35 Oakes St SW #500 Grand Rapids, MI 49503



The Original United Citizens of Southwest Detroit

March 21, 2022

Donele Wilkins Green Door Initiative 7650 Second Ave Detroit, MI 48202

Dear Donele Wilkins:

I write on behalf of The Original United Citizens of Southwest Detroit (OUCSD) 48217 in support of Green Door Initiative's proposal to the Environmental Protection Agency for a grant to fund "Monitoring Detroit's Air for Environmental Justice." We support the grant application and its focus on expanding a community-led air monitoring sensor network. This network will provide data to guide the health and environmental interventions that will reduce exposure to air pollution and ultimately the disproportionate health impacts of pollution that Detroiters experience.

Detroit 48217 advocates for a cleaner and healthier environment in our zip code which is disproportionately burdened by poor air quality and other environmental hazards. We have led coalitions, pushed for better enforcement, and advocated for policies that would better protect health from cumulative threats and impacts.

Detroit 48217 acknowledges a specific role we will fulfill in this partnership. If this proposal is funded, we would expect to serve in an advisory capacity for the "Monitoring Detroit's Air for Environmental Justice" project. We would guide the project team on air sensor locations and other key components of the network to consider. Our guidance would be based on the community feedback and outcomes we learn as Steering Committee members on the current project to collaboratively plan the goals and design of a community-led air sensor network.

We look forward to working with you to monitor our air, improve health outcomes, and reduce health disparities.

Sincerely,

Theresa Landrum

Theresa Landrum, Community Communications Liaison
The Original United Citizens of Southwest Detroit (OUCSD)

COVER PAGE Managing Detroit's Air for Environmental Justice

Applicant Information

Organization Name and address: Green Door Initiative, 7650 Second Ave. Detroit, MI 48202

Primary contact: Donele Wilkins, 313-922-8055, donele@greendoorinitiative.org

DUNS number: 965044113

<u>Set aside:</u> Community-based organization set-aside

<u>Description of Green Door Initiative</u>: Established in 2010, Green Door Initiative's (GDI) mission is to ensure that local residents are environmentally literate; empowered; and equipped to live healthy, sustainable lives and participate fully in the economy. Ongoing and past successes include workforce training to help low-income and formerly incarcerated residents transition into family-sustaining employment, with over 600+ residents trained and a 96% job placement rate to date; youth development; policy work at the state and national levels; and award-winning community involvement work. GDI has a well-established respected reputation locally, regionally and nationally as an advocate for environmental and climate justice.

Project Partner Organizations:

Ecology Center (primary contact): Kathryn Savoie

JustAir (primary contact): Darren Riley Clarity (primary contact): Sean Wihera **Project Location:** Detroit, Michigan

Air Pollutant Scope: PM_{2.5}, Black Carbon, NO₂, VOCs, CO, O₂, H₂S, CH₄, SO₂, NH₃, and CHOH

Budget Summary:

EPA funding requested	Total project cost
\$496,790.27	\$496,790.27

Project Period: November 2022 - October 2025

Short project description: The GDI team will expand the existing network of multi-pollutant community scale sensors in Detroit, engage Detroiters in a community air advisory group to ensure the community has a voice in air monitoring, and build community capacity and knowledge to use and apply local-scale, real-time air quality information. Our project will lead to improvements in local air quality, enhanced local partnerships, and a reduction in disproportionate health impacts that Detroit residents experience.

WORKPLAN

Section 1 - Project Summary and Approach

1A. Overall Project Scope. Detailed project summary and description of activities.

Detailed Project Summary

Air pollution is known to adversely affect human health, including causing and exacerbating asthma. Worldwide, air pollution kills 9 million people every year. Health impacts of pollution fall disproportionately on low-income populations and communities of color. Health impacts of pollution vary depending on the type of pollutant and duration of exposure, proximity to industrial and vehicular sources and socio-economic factors such as race, class, and access to health care. Detroit (located in Wayne County, Michigan), suffer more from poor air quality and higher rates of asthma than others.

The proposed project leverages existing air quality monitoring expertise in Detroit. Our team will utilize, expand, and continue to maintain a network of community-based air sensors we previously installed. We will also leverage and expand an existing community monitoring advisory group, who will form this project's Advisory Team (AT), and a practitioner group, the Detroit Air Quality Sensor Learning Collaborative (AQSLC), to give the community a larger voice in monitoring their air quality. As a result of our project, local partnerships and relationships will be expanded and strengthened, providing opportunities for enhanced understanding of the local air pollution landscape – and from this foundation, sustainable solutions to air pollution problems in Detroit will emerge. Finally, our project will result in increased community knowledge, reduced exposure rates, and better, more equitable health outcomes.

Description of Activities:

Project planning and management. Upon awarding of the grant, the Project Manager (PM) will be responsible for setting up the project's infrastructure including tracking and monitoring of progress through the work plan and a budget tracking system outlining how time/costs will be tracked. The Quality Assurance/Quality Control (QA/QC) Lead will ensure a QA/QC plan is operating. Conduct air quality monitoring to expand the existing air monitoring network. Over the last three years, our team installed over 50 stationary and wearable monitors from Clarity, Purple Air, Aeroqual and Plum Labs. Under this project, we will install an additional 30 air sensors in Detroit to support the community's air monitoring goals (utilizing 25 new air sensors and 5 existing) Data will be geographically and temporally granular, showing new information about pollutant levels in many Detroit neighborhoods. We will work under the guidance of the AT.

Establish a project Advisory Team. The project team will establish an AT composed of members of an existing community monitoring advisory group and of residents that we will recruit from neighborhoods across all of Detroit. The AT will ensure that the project supports the air monitoring goals identified by the community air advisory group in an ongoing planning process (which concludes in fall of 2022, when the community air advisory group will also conclude its work) and through this project's community engagement activities.

Create workforce development opportunities in the green economy. The project team will train one Detroit resident on air sensor use, installation, maintenance, and data interpretation. Once trained, this person will install the air sensors, perform routine maintenance, and conduct sensor checks periodically or as needed to support data quality.

Conduct community capacity and leadership building activities, as follows:

- Establish an *Air Quality Advocacy Academy*. The academy will train 14 Detroit residents, preparing them to train others on topics including air quality policies, permitting and enforcement; air pollution sources and health impacts; how to select, maintain, and use air sensors and interpret air sensor data; the history of environmental justice in Detroit; and how to use existing tools such as the Toxic Release Inventory and EPA's EJSCREEN. Advocacy academy training will occur twice per month.

¹ Phillip J. Landrigan et al., 2017 The Lancet Commission on Pollution and Health, The Lancet Commissions Volume 391, Issue 10119, p462-512, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32345-0/fulltext

- Plan and conduct a panel of air quality and environmental justice experts.
- Plan and conduct a retreat for academy participants to develop a shared strategy for using the air sensor data to improve air quality and health throughout Detroit.
- Conduct three workshops on the topics of air quality and monitoring for the public. Sessions will be recorded and made available online to support increased reach and participation.

Visualize and apply air sensor data. The project team will collaborate with other groups to integrate our air sensor data with other sensor reporting platforms in use. It will also develop an alert system for residents to receive text notifications when the air sensor network picks up pollution levels that are detrimental to human health. Notifications will include recommendations for reducing or avoiding exposure when pollution levels surpass health thresholds.

Conduct emergency air monitoring. The project team will regularly measure pollutants around areas of concern. We will procure and install air monitors for emergency monitoring situations where residents need immediate information about the nature of a toxic release to air. Pollutants measured by one or more instruments would include Volatile Organic Compounds (VOCs), Carbon Monoxide (CO), Oxygen (O₂), Hydrogen Sulfide (H₂S), Methane (CH₄), Sulfur dioxide (SO₂), Ammonia (NH₃), Formaldehyde (CH20), Particulate matter (PM), humidity, and temperature. We will develop, maintain, and implement protocols for how to utilize instruments to safely collect quality data around sources of concern, and create a program to regularly share monitoring data with community through existing web portals. We will organize and train a cohort of investigators, including multi-lingual investigators who can work in Detroit's diverse neighborhoods.

Conduct project evaluation activities. We will develop and implement an evaluation plan that will assess how well the project achieved its stated goals, outputs, and outcomes. We will also evaluate the effectiveness of the project's training and educational activities and collect and share any lessons learned and successes from the project.

<u>Steps to meet program objectives and execute the project</u>. The project team will implement a continuous quality improvement approach to ensure that we meet program objectives. This includes conducting stringent quality control reviews of all written materials and training deliverables to ensure technical accuracy and clarity for multiple audiences.

1B. Project Significance.

Extent of the problem, environmental impacts, and affected communities' vulnerabilities. Residents of Wayne County, where Detroit is located, are exposed to elevated levels of pollutants from industrial facilities and vehicular traffic. Critical pollutants include volatile organic compounds, PM_{2.5}, and PM₁₀, nitrous dioxide (NO₂), CO, H₂S, CH₄, SO₂, NH₃, and CHOH.

Tailpipe emissions from transportation contribute to surface **PM** and **ozone** formation. Roadway emissions are concentrated in Detroit where multiple expressways intersect. The city is home to one of the nation's busiest international border crossings, with 10,000 trucks per day crossing between Detroit and Windsor, Ontario. A new international bridge is under construction that will expand truck traffic when it opens in 2024.

Detroit is home to Michigan's only oil refinery, a wastewater treatment plant serving 127 municipalities in southeastern Michigan, major intermodal freight terminals, numerous auto and steel related industries, and truck and train traffic from major intermodal freight terminals. While much attention has been paid to these air quality concerns in Southwest Detroit, less attention and support has been directed to community concerns about air pollution and asthma in other neighborhoods across the city. For example, the Stellantis plant is the largest source of toxic chemical release within the city according to EPA Toxic Release Inventory. It has recently undergone a major expansion, raising concerns about increased emissions of **VOCs** and **NO2** which contribute to the formation of **ozone** pollution, exacerbating asthma on Detroit's eastside.

Except for limited Federal Equivalent Methods (FEM) regulatory monitoring by State of Michigan and a nascent network air sensors in Detroit, much of what the public can access about air quality that is specific to where they live is achieved by modeling or air quality alerts. Modeling is not designed to provide real-time air quality information and can come with its own caveats for accuracy and using the model for decision-making. Standard alerts, such as AirNow, may not be an accurate

reflection of air quality where someone lives and over the course of the day, due to spatial and temporal mismatch and a limited number of pollutants included in the index. This means that there is a data gap in accurate real-time air quality measurements. As a result, residents and other stakeholders are not benefitting from the full advantage of a clearer picture of air quality data they can use specifically to plan and make decisions regarding their exposure and health.

Exposure to air pollution has a significant impact on the health and well-being of Detroiters. Air pollutants in Detroit are linked to asthma, low birth weight, and cardiovascular disease. An estimated 721 premature deaths occur annually in Detroit from exposure to pollution, and the majority of these (571) can be attributed to particulate matter (**PM**_{2.5}) pollution, with the remainder due to **ozone** from **VOCs** and **NO**₂. Air pollution contributes to 1,500 hospitalizations, over 200,000 days with respiratory symptoms among children with asthma, 500,000 missed days of work, and 990,000 days of missed school. The annual monetized value of health burden from air pollution is \$7.3 billion.²

How the proposed project addresses the problem, project benefits to the public, and audiences served. Our proposed project addresses the problem by providing accurate, real-time, and spatially and temporally granular air quality data. Residents and other stakeholders can utilize this data to reduce their exposure and drive the solutions that reduce pollution. Our project benefits the public by putting the design and use of an air sensor network in their hands, ensuring that it will serve their needs. The project will prepare community stakeholders to actively engage with, advise, and lead air quality solutions to improve health. Detroit residents are our primary intended audience. However, data from the air sensor network will be publicly available. We will work with residents, partners, stakeholders, and collaborators to ensure that sensor data will guide shared decision-making on longer-term interventions to reduce pollution, exposure, and negative health impacts related to poor air quality. How the project will address needs and concerns of affected communities. The AT will ensure that the results of an ongoing, community-led planning process for the development of a low-cost air sensor network will be incorporated into the design of this project. Additionally, this project's work plan includes opportunities for continual feedback and engagement with residents and stakeholders on the project's implementation.

Section 2 - Community Involvement

A. Community Partnerships

As a Community Based Environmental Justice organization, GDI models the benefits of community engagement see Table 1 below. Many of these organizations maintain existing and longstanding partnerships with GDI on projects and campaigns to improve Detroit's environment and will likely continue after the grant. Partners benefit from their participation outside of any subaward or contract because we share the goal of improving Detroit's air quality for better health. The partners in Table 1 will provide support under the leadership and guidance of GDI.

	Table 1: Community Partnerships				
Organization Name and Role	Organization's Project Activities	Organization's Expertise and Resources			
Ecology Center Partner & Project Team member	1. Guide the air sensor use, maintenance, and data interpretation portions of the project's community-wide air quality training. 2. Work with project consultants to ensure that QA/QC meets or exceeds industry standards and best practices. 3. Train one person in air sensor installation, maintenance and routine inspections related to data quality control and data interpretation. 4. Coordinate this project's expansion of the existing air sensor network with the outcomes of the community-led planning process for the development of a low-cost air sensor network.	Expertise: Community engagement; collaborative decision-making; and facilitation. Air sensor project design, use cases, installation, maintenance, data collection, QA, and QC. Resources: Staff time; Air Quality Sensor Learning Collaborative and other relationships that support education and engagement.			

² http://caphedetroit.sph.umich.edu/air-pollutant-source-exposures-health-impacts

JustAir Partner & Project Team member	1. Advise network development based on community feedback. 2. Develop an alert system for text notifications when the air sensor network picks up pollution levels which are detrimental for health. 3. Develop an electronic, publicly accessible dashboard for data from these sensors to be displayed and for integrating other air sensor data available through other project platforms. 4. Ensure QA/QC protocols in place and implemented for data integration.	Expertise: Air sensor project design, use cases, installation, maintenance, data collection, QA, and QC. Translating sensor data into usable information for residents about their air. Resources: Staff time
Clarity Partner	1. Install and maintain air sensors. 2.Lead QA/QC, reporting to the EC technical lead for the project. Ensure that data are of adequate quality to support project goals. 3. Provide a data visualization platform for Clarity sensor data.	Expertise: Air sensor technology; sensor calibration; sensor data validation and interpretation; data visualization Resources: staff time, air sensors, a data visualization platform
Community Action to Promote Healthy Environments (CAPHE) Collaborator	Advise the development of the policy advocacy aspects of the air sensor training for community members.	Expertise: Community based participatory research; understanding and communicating disproportionate health impacts; solutions to reduce exposure to air pollution; policy advocacy. Resources: staff time; technical assistance
Michigan Environmental Justice Coalition (MEJC) Collaborator	Advise network development based on community feedback.	Expertise: Environmental justice policy, research, and advocacy; stakeholder engagement Resources: Staff time
Eastside Community Network (ECN) Collaborator	Advise network development based on community feedback.	Expertise: Community and stakeholder engagement; air quality and green infrastructure policies Resources: Staff time
The Original United Citizens of Southwest Detroit Collaborator	Advise network development based on community feedback.	Expertise: Air quality policies; education and engagement; air quality advocacy Resources: Staff/volunteer time
Georgia Street Collective Collaborator	Advise network development based on community feedback.	Expertise: advocacy and engagement; community development & environment Resources: Staff/volunteer time
Michigan Department of Health and Human Services (MDHHS) Collaborator	Advise the development of the training module on the impacts of air quality on health.	Expertise: Air quality's impact on public health, asthma surveillance, community educational resources on asthma. Resources: staff time; technical assistance
Great Lakes Environmental Law Center (GLELC) Collaborator	Advise the development of the training module on environmental policies and decision-making processes.	Expertise: Environmental law, environmental policies, and policy-making processes; enforcement; environmental justice Resources: Staff time; technical assistance
Michigan Department of Environment, Great Lakes, and Energy (EGLE) Collaborator	Collaborative site support including regulatory air monitoring data and other data.	Expertise: air quality permitting and enforcement procedures; air quality monitoring. Resources: Staff time; technical assistance

B. Community Engagement

Approach for incorporating community engagement in project design and performance. GDI will leverage decades of community engagement experience for the successful involvement of local stakeholders with respect to the design and performance of this project GDI has been effective in helping residents, policymakers and others for environmental justice. We've provided more than 27,000 hours of environmental training throughout the city, hired more than 100 youth for summer jobs and provided job training for over 600 adults, including formerly incarcerated residents with a 92% job placement rate.

The Managing Detroit's Air Quality for Environmental Justice project was designed in response to feedback from residents who were concerned about their air quality. Detroit has seen growing interest in low-cost air sensors as evidenced by ongoing air sensor deployment. The Advisory Team (AT) will help guide decisions about air sensor locations, pollutants monitored, and the monitoring/research questions the project will seek to answer, ensuring the continued involvement of community members in the project.

Additional community engagement, such as the workforce training, advocacy academy, and air quality workshops, will ensure that residents understand how to interpret and act on the data, and are prepared to train others after the conclusion of the grant period. Engagement activities will expand the number of stakeholders representing neighborhoods throughout Detroit.

Data useability and accessibility. To ensure data useability, air sensor technology will have verified performance characteristics and rigorous QA/QC protocols in place. Training for residents will include modules on data interpretation and air sensor data uses. To ensure data accessibility, sensor data will be available online in real-time via a publicly accessible dashboard, with text message alerts throughout the lifetime of the project when air quality is poor. The project team will notify air quality stakeholders via the AQSLC and other means that the data is available and will share information on how to access the data in real time.

C. Community Based Organization Set-Aside.

GDI launched in August 2010 and was founded by Donele Wilkins, a lifelong Detroit resident, change-agent, and community activist. The goal of GDI is to change the discourse for environmental justice (EJ) in the city of Detroit through community engagement, empowerment, and education. GDI's work has focused on facilitating the revitalization, rebuilding, and restoring of neighborhoods, particularly in low-income, people of color and underserved areas. Our projects focus on achieving environmental and economic justice and ensuring that residents are empowered and equipped to live healthy, sustainable lives fully participating in the green economy.

GDI staff bring 50+ years of collective wisdom, project success, and lessons learned. For example, a snapshot of our past successes follows. GDI created an Air Quality Management Plan for childcare facilities in Detroit, as part of a broader effort to hone best practices for safeguarding children's health and reducing environmental sources of asthma triggers among the most vulnerable populations. Currently partnering with 50+ childcare providers, the Detroit Asthma Coalition, Detroit Health Department and Michigan Health and Human Services. GDI has also provided more than 25,000 hours of general environmental safety, health and hazard awareness training to Detroit area residents. Attachment 3 contains a copy of the GDI charter.

Section 3 – Environmental Justice and Underserved Communities

Demographics. According to the 2020 census, Detroit is home to 639,111 people. Of those living in Detroit in 2020, 7.2% are children younger than five years and 13.9% are seniors 65 years and older. Seventy-seven percent of the population are African American, 7.7% are Hispanic or Latino, and 14.4% are white, with 6.1% of the population being foreign-born and 11.3% percent of the population speaking a language other than English at home. Additionally, 33.2% of the population is living in poverty, with per capita income for 2016-2020 at \$19,569 and median household income for the same period at \$32,498. Only 54.7% of the population aged 16 and older reported being in the civilian labor force, and 9.1% of the population under age 65 report not having health insurance.³

³ 2020 US Census. Quick Facts for Detroit City. [HYPERLINK "https://www.census.gov/quickfacts/detroitcitymichigan"] [PAGE]

Environmental disparities. The age of Detroit's infrastructure and housing stock puts children at risk for lead exposure (73.9% of Detroit's housing was built before 1955 and contains lead-based paint⁴ and there are over 80,000 lead service lines in the city's distribution system⁵). Proximity to highways, industrial activities, and brownfield sites contributes to cumulative health risks from exposure to air, soil, and water pollution. While some progress has been made in reducing air pollution, Wayne County is a nonattainment area for ozone; Southwest Detroit and the Downriver area of Wayne County are designated a nonattainment area for increased levels of **SO**₂. Refer to section 1B for additional data on environmental disparities.

Public health disparities. These exposures have known health and learning impacts. Unsurprisingly, several additional public health disparities plague Detroit's most vulnerable at-risk residents. Over 50,000 Detroit children are lead poisoned. In some areas of the city, infant mortality is at 14 for every 1,000 births compared to the state with 6 deaths for every 1,000 births. Detroiters suffer from asthma at rates much higher than the rest of Michiganders, a disparity that has only increased in recent years. A new study from the Michigan Department of Health & Human Services (MDHHS)⁷ found that asthma rates in Detroit residents were 46% higher than those for all Michigan residents, an increase from 29% from the 2016 study. Current data also showed a significant difference between asthma prevalence among children in Detroit (14.6%) compared to the State of Michigan (8.4%), a disparity which was not seen previously. In Detroit, the largest municipality in Wayne County, residents were hospitalized for asthma at least four times as often as Michigan residents, and asthma hospitalization for Black Detroit residents was more than three times higher than white residents in 2019. Wayne State University researchers who conducted a study to understand spatial distribution of air pollution in Detroit, found asthma rates exhibited statistically significant positive correlations with total VOCs and BTEX compounds, and preterm birth rates were associated with PM₁₀ and VOC compounds. 89 Poor air quality and COVID-19 disparities. Recent evidence from a Harvard University study has shown that areas with worse air quality had increased risk of infection by the SAR-CoV2 virus. The COVID-19 death rate for Black Americans aged 35-44 is ten times higher than for white Americans of the same age. Increased exposure to air pollution is among the factors that increase the risk of mortality from COVID-19.10 As of March 23, 2022, there were 123,797 confirmed total COVID-19 cases in Detroit and 3,270 confirmed deaths, or 2.64%.¹¹ In the state of Michigan overall, there were 32,714 confirmed deaths or a rate of 1.6%. 12 83.7% of deaths due to COVID-19 in Detroit occurred in the Black & African American population.¹³ Cases per million by race in Michigan show that Black Michiganders suffer the highest case

⁴ CLEARCorps Detroit. "Lead Poisoning." [HYPERLINK "https://clearcorpsdetroit.org/lead-faq/"]

⁵ Detroit Water and Sewerage Department. "Lead Service Line Replacement Program." [HYPERLINK

[&]quot;https://detroitmi.gov/departments/water-and-sewerage-department/dwsd-projects/making-detroit-lead-safe"]

⁶ Kweon, Byoung-Suk, Paul Mohai, Sangyun Lee, and Amy M. Sametshaw. [HYPERLINK

[&]quot;https://journals.sagepub.com/doi/pdf/10.1177/0265813516673060"] Environment and Planning B: Urban Analytics and City Science 45, no. 2 (2018): 312-329.

⁷ MDHHS, 2021, Detroit: The Current Status of Asthma Burden, https://www.michigan.gov/documents/mdhhs/Detroit-AsthmaBurden-2021_Update_748381_7.pdf

⁸ Lemke, L.D., Lamerato, L.E., Xu, X., Booza, J.C., Reiners, J.J., Raymond Iii, D.M., Villeneuve, P.J., Lavigne, E., Larkin, D. and Krouse, H.J., 2014. Geospatial relationships of air pollution and acute asthma events across the Detroit—Windsor international border: Study design and preliminary results. *Journal of exposure science & environmental epidemiology*, 24(4), pp.346-357.

⁹ Cassidy-Bushrow, A.E., Burmeister, C., Birbeck, J., Chen, Y., Lamerato, L., Lemke, L.D., Li, J., Mor, G., O'Leary, B.F., Peters, R.M. and Reiners Jr, J.J., 2021. Ambient BTEX exposure and mid-pregnancy inflammatory biomarkers in pregnant African American women. *Journal of reproductive immunology*, 145, p.103305.

¹⁰ Tiffany N Ford, Sarah Reber, Richard V. Reeves. Race gaps in COVID-19 deaths are even bigger than they appear, Brookings Institute, June 6, 2020.

¹¹ City of Detroit Health Department. COVID-19 Cases Dashboard. [HYPERLINK "https://detroitmi.gov/departments/detroithealth-department"]

¹² State of Michigan Coronavirus dashboard. [HYPERLINK "https://www.michigan.gov/coronavirus/0,9753,7-406-98163_98173---,00.html"]

 $^{^{13}}$ City of Detroit Health Department. COVID-19 Cases Dashboard. [HYPERLINK "https://detroitmi.gov/departments/detroithealth-department"]

rate at 157,274 per million. Similarly, Black Michiganders experienced the highest death rate due to COVID-19 at 4,174 per million. ¹⁴

Clearly, the data shows Detroit residents and, in particular, Black Detroit residents face disproportionate, adverse risks from COVID-19, air pollution, and other sources. Additionally, cumulative effects of these risk factors coupled with challenges posed by high unemployment and poverty rates, and historic racial injustice and discrimination, create compounded trauma for Detroit's Black residents and perpetuate health and environmental disparities. Seniors and children are especially vulnerable to the health consequences of adverse risk and compounded traumas. See table 2 for a summary of how the project will effectively address disproportionate outcomes and adverse impacts.

<u>Section 4 – Environmental Results—Outcomes, Outputs and Performance Measures</u>

A. Expected Project Outputs and Outcomes

Table 2 below shows the outputs and outcomes we anticipate will occur as a result of this project.

	Table 2: Expected Project Activities, Outputs,	Outcomes, and Benefits
Activities	Outputs	Outcomes and Benefits
Conduct air quality monitoring to expand the existing air monitoring network.	25 new monitors (30 total for the project) in Detroit with coverage in all City Council districts.	Real-time, meaningful air quality data is available and accessible to the public in Detroit.
Establish a project Advisory Team.	15 local residents actively involved and empowered to make decisions.	Stronger community engagement on air quality and air monitoring. Guidance on the development of the training – in particular; one policy and law module, one policy advocacy module, and one health module.
Project planning and management	One budget management plan; one work plan; one QA/QC plan for data protocols & project management; weekly check-in meetings; quarterly progress reports.	Project efficiency and adherence to schedule and budget parameters. System to ensure issues that may arise are quickly identified and resolved. System for ensuring frequent communication among team members.
Create workforce development opportunities in the green economy	One resident is trained and able to perform maintenance and installation of monitors.	At the end of their apprenticeship, one resident now has additional skills in the green economy. GDI will have created a model for this emerging job opportunity.
Establish Air Quality Advocacy Academy (AQAA). Conduct community capacity and leadership building activities.	Train 14 residents at the AQAA; Convene Quarterly meetings of the Air Quality Sensor Learning Collaborative; Develop an environmental health curriculum covering air quality, monitoring, and health; Sponsor an air quality training retreat; Develop and Disseminate infographics and fact sheet series throughout city.	Increased residents' awareness and understanding of why air quality is important; how to access, interpret and use air monitoring data. More empowered residents. They can use air monitoring data to support advocacy, better protect themselves, and push for greater enforcement. Increased capacity. 14 trained Detroit community leaders will be able to train others in their neighborhoods. Stronger community engagement on air quality and air monitoring.
Visualize and apply air sensor data.	One air quality notification system; One data visualization platform; One dashboard for multiple sources of sensor data; One QA/QC protocol for integrating sensor data; Two methods to contact the project team for data and alert questions.	Real-time, easy-to-understand air quality data will be available to residents. A two-way communication channel exists to answer questions about the data and air quality alerts. Air sensor data from multiple existing platforms and sensor types can be integrated to the project's platform, with full QA/QC ensuring useability.
Emergency air monitoring	One protocol for emergency response air monitoring. Nine monitors for emergency monitoring. One program to regularly share	One community-specific response protocol that can be put into action when air quality incidents or emergencies occur.

¹⁴ State of Michigan Coronavirus dashboard. [HYPERLINK "https://www.michigan.gov/coronavirus/0,9753,7-406-98163_98173---,00.html"]

	monitoring data through existing web portals. At least three residents are trained and able to conduct emergency air monitoring investigations.	Clear, actionable information shared with residents in language they understand. Three residents have additional skills in the green economy.
Conduct project evaluation activities.	Weekly and quarterly performance and schedule check-ins, with opportunities to quickly adjust as issues arise. Weekly and quarterly budget tracking. Issues and resolution will be documented in quarterly reports. One evaluation plan including pre-, during, and postmeasurements against outcomes.	Immediate course corrections throughout the project will help the project stay on time and within budget. Documented quarterly reports will enhance everyone's understanding of what's working well and lessons learned.

As outlined in Table 2, this project's activities will drive community-led air monitoring, leading to measurable outputs and outcomes that deepen our understanding of air quality and strengthen our work to reduce health disparities, moving the city towards a more environmentally sound just future. As shown in Section 4.B, performance measures and an evaluation plan are in place to track and measure progress and evaluate results.

B. Performance Measures and Plan

In keeping with GDI's ongoing commitment to excellence and continuous quality improvement, a QA/QC Manager will be responsible for ensuring technical accuracy and conformance with project objectives, for all data and project deliverables. Weekly project team meetings will include reports on progress towards expected outputs and outcomes, as well as resolutions for any unexpected issues that may arise.

Additionally, the **PM will receive and monitor weekly reports of project expenditures**, to track actual expenditures against projected costs and make sure the project stays within budget. Any budget-related issues will be discussed and addressed during weekly team meetings. The team will document best practices, successes, and areas for continuous improvement as we go, and share relevant information with stakeholders on a monthly or other basis as appropriate. Additionally, the project team will conduct a **pre-measure to benchmark conditions pre-project, will take measurements during project implementation, and conduct a post-measure** assessment to confirm that the outcomes were achieved and identify any areas for improvement moving forward. Any issues or improvements to air monitoring or sensor data collection or analysis will be done in communication with the AT, the Academy, and shared with other stakeholders as appropriate to ensure transparency.

In addition to the weekly and monthly monitoring, we will conduct quarterly project evaluations to ensure that we're able to effectively resolve any issues in a timely manner. We will compile an overall project evaluation summary report summarizing the overall project, results, lessons learned, and next steps.

Timeline and Milestones

Table 3:	Timeline and Milestones			
Year 1 Activities: Planning, Preparation, and Training	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Prepare quarterly reports.	Report due	Report due	Report due	Report due
Set up project infrastructure, including a work plan and budget tracking system, and evaluation plan	Complete end of Q1			
Set in motion QA/QC plan for data and project management.	Begin			
Recruit for, launch, and coordinate AT activities.			Recruit	Launch & coordinate.
Design & finalize the content, structure, activities, and schedule for community capacity-building opportunities, workforce development training, and emergency monitoring training.				

	.,			
Recruit for capacity-building, training, and emergency monitoring opportunities.		Begin	Conclude	
Implement capacity-building, workforce training, and emergency monitoring training opportunities.			First air monitoring workshop.	Emergency monitoring training; workforce training.
Design the air sensor network with AT.				
Set up dashboard for air sensor data.				
Develop program for integrating emergency monitoring data with the dashboard.				
Develop and promote text alert system and Q&A communication channels for text alerts.				
Develop program for integrating air sensor data from different platforms into the dashboard.				
Year 2 Activities: Training & Implementation	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Prepare quarterly reports	Report due	Report due	Report due	Report due
Implement capacity-building, workforce training, and emergency monitoring training opportunities.	Advocacy Academy Starts	Second air monitoring workshop	Advocacy Academy ends EJ panel	Third air monitoring workshop. Retreat.
Install the air sensor network and begin monitoring.	Install			
Follow QA/QC Plan				
Conduct the emergency response monitoring.				
Conclude AT activities.				
Launch and operate dashboard and text alert system	Launch			
Workforce field experience with air sensor maintenance and installation.				
Recruit other platform managers to share their data with the dashboard, utilizing data integration system.				
Manage data integration system including additional QA/QC considerations.				
Year 3 Activities: Implementation, Conclusion, Evaluation	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Prepare quarterly reports	Report due	Report due	Report due	FINAL report due
Conduct emergency response monitoring				Conclude
QA/QC activities, air sensor network monitoring, text alerts, and dashboard management.				Conclude
Conduct and submit full evaluation				
Discuss and pursue opportunities to continue to operate and expand the air sensor network.				

<u>Section 5 – Quality Assurance Statement</u>

Refer to Attachment 4 for GDI's QA/QC statement. The QA/QC statement includes a description of how the project team will implement a QA system to ensure accuracy and validity of all data and collection procedures, as well as reports and deliverables.

<u>Section 6 – Programmatic Capability and Past Performance</u>

A selected snapshot of our team's past performance on other grants or cooperative agreements over the past three years is shown in Table 4 below.

	TABLE 4: Selected Past Perfo	rmance and Rep	orting Requiremen	ts	
Project Name	Funding source	Successful completion	Met reporting requirements	Met timeline for outputs and outcomes	Submitted acceptable final reports
Hazardous Materials Worker Health and Safety Training	National Institute for Environmental Health Sciences	Yes	Yes	Yes	Yes
Environmental Careers Training Program	National Institute for Environmental Health Sciences	Yes	Yes	Yes	Yes
COVID-19 education and outreach	Midwest Environmental Justice Network	Yes	Yes	Yes	Yes
Air Quality Management Plan	Michigan Department of Health and Human Services and Michigan Public Health Institute	Yes	Yes	Yes	Yes
Environmental Careers Training Program	Detroit Department of Employment Solutions	Yes	Yes	Yes	Yes

- A. <u>Past Performance</u> Refer to Table 4 for a list of assistance agreements that GDI has successfully performed within the last three years. GDI successfully performed its agreements thanks to deep expertise in the project areas, strong partnerships, and its solid operations infrastructure with established systems for tracking project management, reporting, and evaluation.
- **B.** <u>Reporting Requirements</u> Refer to Table 4 for GDI's history of meeting reporting requirements with timely reporting on progress towards expected outputs and outcomes.

C. Staff Expertise.

GDI is an environmental justice organization that primarily serves African Americans that make up 77% of Detroit's population. GDI has effectively helped residents, childcare providers and community organizations better understand the impacts of COVID-19, bad environmental exposures related to poor air and water quality, climate change and other legacy issues that threaten public health.

Donele Wilkins is the founder of the Green Door Initiative and will serve as the Project Director. Leader, visionary, result oriented, Donele Wilkins has demonstrated servant leadership in her hometown Detroit for nearly 20 years. First, by leading the local movement for environmental justice on the frontlines, and secondarily expanding to achieving true sustainability for all. Her achievements include participating in the development and adoption of an Environmental Justice Policy in the state of Michigan and conceiving and launching the first Green Jobs Training Program in the city.

Leila Mekias will serve as the Project Manager. She has ten years of experience managing projects to foster climate preparedness and sustainable development. Before joining the Green Door Initiative team, Leila worked for the City of Detroit Department of Public Health, where she developed programs and policies to foster a healthier environment in Detroit, including a use case and implementation plan for the launch of a low-cost network of air sensors.

Sandra Turner Handy will serve as the Engagement and Training Lead. She has twenty-five years of experience serving as a Legislative Aide to a Michigan state Senator and a Michigan state representative. She has served as a political advisor on environmental justice issues for the Michigan Environmental Council in Detroit.

Section 7 - Budget

A. Budget Detail

Table 5: Project Budget					
Line Item and Itemized Cost		EPA Funding			
	Year 1	Year 2	Year 3	Total	
Personnel					
(1) Project Manager @ \$37/hour (0.4 FTE year 1, 0.75 FTE year 2, 0.5 FTE year 3)	\$30,800.00	\$57,750.00	\$38,500.00	\$127,050.00	
(1) Project Assistant @ \$25/hour (0.4 FTE year 1, 0.4 FTE year 2, 0.2 FTE year 3)	\$20,800.00	\$20,800.00	\$10,400.00	\$52,000.00	
(1) Engagement and Training Lead @ \$30/hour (0.1 FTE year 1, 0.48 FTE year 2, 0.2 FTE year 3)	\$6,240.00	\$30,000.00	\$12,480.00	\$48,720.00	
Total Personnel				\$227,770.00	
Fringe Benefits					
10% of total salary	\$5,784.00	\$10,855.00	\$6,138.00	\$22,777.00	

Total Fringe Benefits				\$22,777.00
Travel				744
1 staff person's travel to a conference.	\$0	\$2,750.00	\$0	\$2,750.00
Total Travel				\$2,750.00
Supplies				
(1) GX 6000 from RKI custom-made to read VOCs in parts per billion (ppb)	\$0	\$3,400	\$0	\$3,400
only.				
(1) GX 2012 from RKI for CO, O ₂ , H ₂ S and CH4.	\$0	\$1,195	\$0	\$1,195
(1) Eagle II from RKI for SO₂, NH₃ and H₂S.	\$0	\$4,295	\$0	\$4,295
(1) FP 31 from RKI for CH ₂ 0 (CHOH)	\$0	\$945	\$0	\$945
(5) The "Bucket" Air Quality Monitor from Public Lab	\$0	\$725	\$0	\$725
Total Supplies				\$10,560
Contractual				
Contract for hardware – 25 air sensors – and services, i.e., air sensor	\$0	\$25287.50	\$25287.50	\$50,575.00
calibration & maintenance, data validation and display				
Contract for air sensor dashboard, incl. QA/QC for data integration to the	\$10,000.00	\$15,000.00	\$15,000	\$40,000.00
dashboard, and text alert system.				
Contract for training in emergency air monitoring and air sensor	\$29,133.86	\$29,133.86	\$29,133.86	\$87,401.59
maintenance; conduct emergency monitoring activities.				
Total Contractual				\$177,976.59
Other				
Insurance/workers compensation for air monitoring trainees working in the	\$1,000.00	\$1,000.00	\$1,000.00	\$3,000.00
field.				
Training stipend (1 person @ \$10,400 per year for years 2&3)	\$0	\$10,400.00	\$10,400.00	\$20,800.00
Contingency (in case of sudden unexpected cost)	\$2,500.00	\$2,500.00	\$2,500.00	\$7,500.00
Total Other				\$31,300.00
Indirect Charges				
Total indirect (5% of total direct cost)				\$23,656.68
Total Funding				\$496,790.27
Total Project Cost				\$496,790.27

B. Reasonableness of Costs

<u>Personnel</u>: The proposed budget covers staff time for a PM with each year's FTE allocated according to the expected volume of work. PM will be responsible for coordinating the work plan for each project activity, guiding project assistant and interns, and coordinating with partners and stakeholders. The project assistant will be crucial for ensuring successful implementation of project activities, with roles in communications and meeting logistics especially. The engagement and training lead will advise the development of the Academy and its training materials and will lead all recruitment efforts. **Total staff time cost**: \$227,770

<u>Fringe benefits:</u> GDI calculates fringe benefits at 10% of total salary. Fringe includes health and liability insurance, payroll fees and 403b contributions. Total fringe cost is \$22,777

<u>Travel:</u> The travel line item includes one staff member's travel to share results/lessons learned with community of practice for capacity-building. It assumes up to a 3-night hotel stay, a round trip flight, any conference fees, and per diem. We envision traveling to a meeting or conference hosted by Partnerships for Environmental Public Health, the American Public Health Association, and/or that is focused on community science. **Total travel: \$2750**

<u>Supplies</u>: The supplies line item covers the cost of purchasing air monitors for the project's emergency response monitoring activities. These monitors offer the best combination of affordability, data accuracy, and ease of use. **Total supplies cost: \$10,560**

<u>Contractual</u>: Contractual activities include the cost of air sensor hardware, sensor calibration and data validation services, sensor maintenance, and a data visualization platform for the sensors which will expand the network; ongoing maintenance of the emergency monitoring program including training, sensor maintenance, and establishing a QA/QC protocol and data integration program specifically for emergency monitoring data; and, creating and running a dashboard that can host air sensor data from multiple platforms (including managing QA/QC for data integration) and creating a text alert system for poor air quality occurrences. See attached sole source justification. **Total contractual costs: \$177,977** <a href="Other: The 'other' budget line item covers the estimated cost of additional insurance that GDI will require to cover trainees during their work in the field. 'Other' also includes some contingency allocation in case of emergency, and the training stipend for year 2 and year 3. **Total other costs: \$31,300**

<u>Indirect:</u> GDI will charge a 5% indirect rate, which is 5% of the total direct cost. Indirect operations and financial staff support and infrastructure, GDI President/CEO staff time, internet phone, office space, and training space. **Total indirect costs: \$23,657**

Total funding: \$496,790

C. Expenditure of Awarded Funds

GDI will ensure that grant funds are expended in a timely and efficient manner. The PM will follow the budget management plan set out during the first quarter of the project to track grant spending.

Section 6 – Optional Attachments

- 1. Partnership Letters
- 2. Resumes of the Project Manager and Other Key Personnel
- 3. GDI charter
- 4. Quality Assurance Statement
- 5. Sole Source Justification Letter



March 24, 2022

Donele Wilkins Green Door Initiative 7650 Second Ave Detroit, MI 48202

Dear Donele Wilkins:

I write on behalf of the Georgia Street Community Collective in support of Green Door Initiative's proposal to the Environmental Protection Agency for a grant to fund Monitoring Detroit's Air Quality for Environmental Justice. We support the grant application and its focus on expanding a community-led air monitoring sensor network. This network will provide data to guide the health and environmental interventions that will reduce exposure to air pollution and ultimately the disproportionate health impacts of pollution that Detroiters experience.

The Georgia Street Community Collective provides the residents of our community with Health by maintaining the GSCC community garden/farm, education, Education by maintaining the GSCC community center/library, Leadership Skills by providing positive role models, Protection by having the GSCC community center/library to give the youth a safe place to meet, and to rebuild our community, One House, One Block, One Neighborhood At A Time.

Georgia Street Community Collective acknowledges a specific role we will fulfill in this partnership. If this proposal is funded, we would expect to serve in an advisory capacity for the Monitoring Detroit's Air Quality for Environmental Justice. We would guide the project team on air sensor locations and other key components of the network to consider. Our guidance would be based on the community feedback and outcomes we learn as Steering Committee members on the current project to collaboratively plan the goals and design of a community-led air sensor network.

We look forward to working with you to monitor our air, improve health outcomes, and reduce health disparities.

Sincerely,

Mark Covingto

President/ Ørector

Georgia Street Community Collective